

Volume 37, Number 24  
Pages 1885–2092  
December 17, 2012  
Part I

SALUS POPULI SUPREMA LEX ESTO

*“The welfare of the people shall be the supreme law.”*



ROBIN CARNAHAN  
SECRETARY OF STATE

MISSOURI  
REGISTER

The *Missouri Register* is an official publication of the state of Missouri, under the authority granted to the secretary of state by sections 536.015, RSMo Supp. 2012 and 536.033, RSMo 2000. Reproduction of rules is allowed; however, no reproduction shall bear the name *Missouri Register* or "official" without the express permission of the secretary of state.

The *Missouri Register* is published semi-monthly by

**SECRETARY OF STATE**

**ROBIN CARNAHAN**

Administrative Rules Division

James C. Kirkpatrick State Information Center  
600 W. Main  
Jefferson City, MO 65101  
(573) 751-4015

**DIRECTOR**

WAYLENE W. HILES

•

**EDITORS**

CURTIS W. TREAT

SALLY L. REID

**ASSOCIATE EDITOR**

DELANE JACQUIN

•

**PUBLICATION TECHNICIAN**

JACQUELINE D. WHITE

•

**SPECIALIST**

MICHAEL C. RISBERG

•

**ADMINISTRATIVE ASSISTANT**

ALISHA DUDENHOEFFER

ISSN 0149-2942, USPS 320-630; periodical postage paid at Jefferson City, MO  
Subscription fee: \$56.00 per year

POSTMASTER: Send change of address notices and undelivered copies to:

**MISSOURI REGISTER**

Office of the Secretary of State

Administrative Rules Division

PO Box 1767

Jefferson City, MO 65102

The *Missouri Register* and *Code of State Regulations* (CSR) are now available on the Internet. The Register address is <http://www.sos.mo.gov/adrules/moreg/moreg.asp> and the CSR is <http://www.sos.mo.gov/adrules/csr/csr.asp>. These websites contain rulemakings and regulations as they appear in the Registers and CSR. These websites do not contain the official copies of the Registers and CSR. The official copies remain the paper copies published by the Office of the Secretary of State pursuant to sections 536.015 and 536.031, RSMo Supp. 2012. While every attempt has been made to ensure accuracy and reliability, the Registers and CSR are presented, to the greatest extent practicable as they appear in the official publications. The Administrative Rules Division may be contacted by email at [rules@sos.mo.gov](mailto:rules@sos.mo.gov).

The secretary of state's office makes every effort to provide program accessibility to all citizens without regard to disability. If you desire this publication in alternate form because of a disability, please contact the Division of Administrative Rules, PO Box 1767, Jefferson City, MO 65102, (573) 751-4015. Hearing impaired citizens should contact the director through Missouri relay, (800) 735-2966.



## IN THIS ISSUE:

### PART I

#### PROPOSED RULES

##### Department of Health and Senior Services

Division of Regulation and Licensure . . . . .1889

### PART II

##### Department of Health and Senior Services

Division of Regulation and Licensure . . . . .2097

##### Department of Insurance, Financial Institutions and Professional Registration

State Board of Pharmacy . . . . .2286

### PART III

##### Department of Insurance, Financial Institutions and Professional Registration

Real Estate Appraisers . . . . .2299

#### ORDERS OF RULEMAKING

##### Department of Agriculture

State Milk Board . . . . .2320

Weights and Measures . . . . .2322

##### Department of Social Services

MO HealthNet Division . . . . .2324

##### Department of Insurance, Financial Institutions and Professional Registration

Missouri State Board of Accountancy . . . . .2325

Missouri Board for Architects, Professional Engineers,

Professional Land Surveyors, and Landscape Architects . .2325

Division of Professional Registration . . . . .2326

Missouri Real Estate Commission . . . . .2326

**CONTRACTOR DEBARMENT LIST** . . . . .2328

**DISSOLUTIONS** . . . . .2330

#### SOURCE GUIDES

**RULE CHANGES SINCE UPDATE** . . . . .2332

**EMERGENCY RULES IN EFFECT** . . . . .2337

**EXECUTIVE ORDERS** . . . . .2339

**REGISTER INDEX** . . . . .2341

Register Filing Deadlines	Register Publication Date	Code Publication Date	Code Effective Date
August 1, 2012	September 4, 2012	September 30, 2012	October 30, 2012
August 15, 2012	September 17, 2012	September 30, 2012	October 30, 2012
September 4, 2012	October 1, 2012	October 31, 2012	November 30, 2012
September 17, 2012	October 15, 2012	October 31, 2012	November 30, 2012
October 1, 2012	November 1, 2012	November 30, 2012	December 30, 2012
October 15, 2012	November 15, 2012	November 30, 2012	December 30, 2012
November 1, 2012	December 3, 2012	December 31, 2012	January 30, 2013
November 15, 2012	December 17, 2012	December 31, 2012	January 30, 2013
December 3, 2012	January 2, 2013	January 29, 2013	February 28, 2013
December 17, 2012	January 15, 2013	January 29, 2013	February 28, 2013
January 2, 2013	February 1, 2013	February 28, 2013	March 30, 2013
January 15, 2013	February 15, 2013	February 28, 2013	March 30, 2013
February 1, 2013	March 1, 2013	March 31, 2013	April 30, 2013
February 15, 2013	March 15, 2013	March 31, 2013	April 30, 2013
March 1, 2013	April 1, 2013	April 30, 2013	May 30, 2013
March 15, 2013	April 15, 2013	April 30, 2013	May 30, 2013
April 1, 2013	May 1, 2013	May 31, 2013	June 30, 2013
April 15, 2013	May 15, 2013	May 31, 2013	June 30, 2013
May 1, 2013	June 3, 2013	June 30, 2013	July 30, 2013
May 15, 2013	June 17, 2013	June 30, 2013	July 30, 2013

Documents will be accepted for filing on all regular workdays from 8:00 a.m. until 5:00 p.m. We encourage early filings to facilitate the timely publication of the *Missouri Register*. Orders of Rulemaking appearing in the *Missouri Register* will be published in the *Code of State Regulations* and become effective as listed in the chart above. Advance notice of large volume filings will facilitate their timely publication. We reserve the right to change the schedule due to special circumstances. Please check the latest publication to verify that no changes have been made in this schedule. To review the entire year's schedule, please check out the website at <http://www.sos.mo.gov/adrules/pubsched.asp>

# Missouri Participating Libraries

The *Missouri Register* and the *Code of State Regulations*, as required by the Missouri Documents Law (section 181.100, RSMo Supp. 2012), are available in the listed participating libraries, as selected by the Missouri State Library:

Jefferson County Library PO Box 1486, 3021 High Ridge High Ridge, MO 63049-1486 (314) 677-8689	Learning Resources Center Mineral Area College PO Box 1000 Park Hills, MO 63601-1000 (573) 431-4593	Hearnes Learning Resources Ctr. Missouri Western State University 4525 Downs Drive St. Joseph, MO 64507-2294 (816) 271-5802	Library Missouri University of Science and Technology 1870 Miner Circle Rolla, MO 65409-0060 (573) 341-4007
Jefferson College Library 1000 Viking Drive Hillsboro, MO 63050-2441 (314) 789-3951 ext. 160	Cape Girardeau Public Library 711 N. Clark Cape Girardeau, MO 63701-4400 (573) 334-5279	Library North Central Missouri College PO Box 111, 1301 Main Street Trenton, MO 64683-0107 (660) 359-3948 ext. 325	Lebanon-Laclede County Library 915 S. Jefferson Ave. Lebanon, MO 65536-3017 (417) 532-2148
St. Louis Public Library 1301 Olive St. St. Louis, MO 63103-2389 (314) 539-0376	Kent Library Southeast Missouri State University One University Plaza Cape Girardeau, MO 63701-4799 (573) 651-2757	Spiva Library Missouri Southern State University 3950 East Newman Road Joplin, MO 64801-1595 (417) 625-9342	University Library Southwest Baptist University 1600 University Ave. Bolivar, MO 65613-2597 (417) 328-1631
St. Louis University Law Library 3700 Lindell Blvd. St. Louis, MO 63108-3478 (314) 977-2742	Riverside Regional Library PO Box 389, 1997 E. Jackson Blvd. Jackson, MO 63755-0389 (573) 243-8141	Missouri State Library 600 West Main, PO Box 387 Jefferson City, MO 65102-0387 (573) 751-3615	Barry-Lawrence Regional Library 213 6th St. Monett, MO 65708-2147 (417) 235-6646
Eden/Webster Library Eden Theological Seminary/ Webster University 475 East Lockwood Ave. St. Louis, MO 63119-3192 (314) 961-2660 ext. 7812	Rutland Library Three Rivers Community College 2080 Three Rivers Blvd. Poplar Bluff, MO 63901-2393 (573) 840-9656	Missouri State Archives 600 West Main, PO Box 778 Jefferson City, MO 65102-0778 (573) 526-6711	Lyons Memorial Library College of the Ozarks General Delivery Point Lookout, MO 65726-9999 (417) 334-6411 ext. 3551
Thomas Jefferson Library University of Missouri-St. Louis 8001 Natural Bridge Road St. Louis, MO 63121-4499 (314) 516-5084	James C. Kirkpatrick Library University of Central Missouri 142 Edwards Library Warrensburg, MO 64093-5020 (660) 543-4149	Elmer Ellis Library University of Missouri-Columbia 106 B Ellis Library Columbia, MO 65211-5149 (573) 882-0748	Garnett Library Missouri State University—West Plains 304 Cleveland West Plains, MO 65775-3414 (417) 255-7945
Washington University Law Library Washington University Campus Box 1171, Mudd Bldg., One Brookings Dr. St. Louis, MO 63130-4899 (314) 935-6443	Kansas City Public Library 14 West 10th Street Kansas City, MO 64105 (816) 701-3546	Library State Historical Society of Missouri 1020 Lowry St. Columbia, MO 65211-7298 (573) 882-9369	Springfield-Greene County Library 4653 S. Campbell Springfield, MO 65801-0760 (417) 874-8110
St. Louis County Library 1640 S. Lindbergh Blvd. St. Louis, MO 63131-3598 (314) 994-3300 ext. 247	Law Library University of Missouri-Kansas City 5100 Rockhill Road Kansas City, MO 64110-2499 (816) 235-2438	Daniel Boone Regional Library PO Box 1267, 100 West Broadway Columbia, MO 65205-1267 (573) 443-3161 ext. 359	Meyer Library Missouri State University PO Box 175, 901 S. National Springfield, MO 65804-0095 (417) 836-4533
Library Maryville University 13550 Conway Road St. Louis, MO 63141-7232 (314) 529-9494	Miller Nichols Library University of Missouri-Kansas City 5100 Rockhill Road Kansas City, MO 64110-2499 (816) 235-2438	School of Law University of Missouri-Columbia 224 Hulston Hall Columbia, MO 65211-0001 (573) 882-1125	
Pickler Memorial Library Truman State University 100 E. Normal Kirksville, MO 63501-4221 (660) 785-7416	B.D. Owens Library Northwest Missouri State University 800 University Drive Maryville, MO 64468-6001 (660) 562-1841	Smiley Memorial Library Central Methodist University 411 Central Methodist Square Fayette, MO 65248-1198 (660) 248-6279	
	St. Joseph Public Library 927 Felix Street St. Joseph, MO 64501-2799 (816) 232-8151		

## HOW TO CITE RULES AND RSMo

**RULES**—Cite material in the *Missouri Register* by volume and page number, for example, Vol. 28, *Missouri Register*, page 27. The approved short form of citation is 28 MoReg 27.

The rules are codified in the *Code of State Regulations* in this system—

Title	Code of State Regulations	Division	Chapter	Rule
1	CSR	10-	1.	010
Department		Agency, Division	General area regulated	Specific area regulated

They are properly cited by using the full citation , i.e., 1 CSR 10-1.010.

Each department of state government is assigned a title. Each agency or division within the department is assigned a division number. The agency then groups its rules into general subject matter areas called chapters and specific areas called rules. Within a rule, the first breakdown is called a section and is designated as (1). Subsection is (A) with further breakdown into paragraph 1., subparagraph A., part (I), subpart (a), item I. and subitem a.

**RSMo**—The most recent version of the statute containing the section number and the date.



**U**nder this heading will appear the text of proposed rules and changes. The notice of proposed rulemaking is required to contain an explanation of any new rule or any change in an existing rule and the reasons therefor. This is set out in the Purpose section with each rule. Also required is a citation to the legal authority to make rules. This appears following the text of the rule, after the word "Authority."

**E**ntirely new rules are printed without any special symbolology under the heading of proposed rule. If an existing rule is to be amended or rescinded, it will have a heading of proposed amendment or proposed rescission. Rules which are proposed to be amended will have new matter printed in boldface type and matter to be deleted placed in brackets.

**A**n important function of the *Missouri Register* is to solicit and encourage public participation in the rulemaking process. The law provides that for every proposed rule, amendment, or rescission there must be a notice that anyone may comment on the proposed action. This comment may take different forms.

**I**f an agency is required by statute to hold a public hearing before making any new rules, then a Notice of Public Hearing will appear following the text of the rule. Hearing dates must be at least thirty (30) days after publication of the notice in the *Missouri Register*. If no hearing is planned or required, the agency must give a Notice to Submit Comments. This allows anyone to file statements in support of or in opposition to the proposed action with the agency within a specified time, no less than thirty (30) days after publication of the notice in the *Missouri Register*.

**A**n agency may hold a public hearing on a rule even though not required by law to hold one. If an agency allows comments to be received following the hearing date, the close of comments date will be used as the beginning day in the ninety- (90-) day-count necessary for the filing of the order of rulemaking.

**I**f an agency decides to hold a public hearing after planning not to, it must withdraw the earlier notice and file a new notice of proposed rulemaking and schedule a hearing for a date not less than thirty (30) days from the date of publication of the new notice.

Proposed Amendment Text Reminder:

**Boldface text indicates new matter.**

*[Bracketed text indicates matter being deleted.]*

**Title 19—DEPARTMENT OF HEALTH AND  
SENIOR SERVICES  
Division 30—Division of Regulation and Licensure  
Chapter 40—Comprehensive Emergency Medical  
Services Systems Regulations**

**PROPOSED RULE**

**19 CSR 30-40.710 Definitions and Abbreviations Relating to Stroke Centers**

*PURPOSE: This rule defines terminology related to stroke centers.*

(1) As used in 19 CSR 30-40.720 and 19 CSR 30-40.730, the following terms shall mean:

(A) Acute—an injury or illness that happens or appears quickly and can be serious or life threatening;

(B) Anesthesiologist assistant (AA)—a person who—

1. Has graduated from an anesthesiologist assistant program accredited by the Medical Association's Committee on Allied Health Education and Accreditation or by its successor agency;

2. Has passed the certifying examination administered by the National Commission on Certification of Anesthesiologist Assistants;

3. Has active certification by the National Commission on Certification of Anesthesiologist Assistants;

4. Is currently licensed as an anesthesiologist assistant in the state of Missouri; and

5. Provides health care services delegated by a licensed anesthesiologist;

(C) Board-admissible/board-eligible—a physician who is eligible to apply or has applied to a specialty board of the American Board of Medical Specialties, the Bureau of Osteopathic Specialties and Boards of Certification, or the Royal College of Physicians and Surgeons of Canada and has received a ruling that he or she has fulfilled the requirements to take the examinations. Board certification is generally obtained within five (5) years of the first appointment;

(D) Board-certified—a physician who has fulfilled all requirements, has satisfactorily completed the written and oral examinations, and has been awarded a board diploma in a specialty field by the American Board of Medical Specialties, the Bureau of Osteopathic Specialties and Boards of Certification, or the Royal College of Physicians and Surgeons of Canada;

(E) Catchment area—the surrounding area served by the institution (the stroke center);

(F) Certified registered nurse anesthetist (CRNA)—a registered nurse who has graduated from a school of nurse anesthesia accredited by the Council on Accreditation of Education Programs of Nurse Anesthesia or its predecessor and who has been certified as a nurse anesthetist by the Council on Certification of Nurse Anesthetists;

(G) Clinical staff—an individual that has specific training and experience in the treatment and management of stroke patients. Examples include: physicians, registered nurses, advanced practice nurses, physician assistants, pharmacists, and technologists;

(H) Clinical team—a team of health care professionals involved in the care of the stroke patient and may include, but not be limited to, neurologists, neuro-interventionalists, neurosurgeons, anesthesiologists, emergency medicine, and other stroke center clinical staff. The clinical team is part of the hospital program's stroke team;

(I) Continuing education—education approved or recognized by a national and/or state professional organization and/or stroke medical director;

(J) Continuing medical education (CME)—the highest level of continuing education for physicians that is approved or recognized by a national and/or state professional organization and/or stroke medical director;

(K) Core team—a subunit of the hospital stroke team consisting of a physician experienced in diagnosing and treating cerebrovascular disease (usually the stroke medical director) and at least one (1) other health care professional or qualified individual competent in stroke care as determined by the hospital (usually the stroke program manager/coordinator);

(L) Credentialed or credentialing—a hospital-specific system of documenting and recognizing the qualifications of medical staff and nurses and authorizing the performance of certain procedures and establishing clinical privileges in the hospital setting;

(M) Department—the Missouri Department of Health and Senior Services;

(N) Door-to-needle time—the time from arrival at the hospital door to initiation of lytic therapy to restore blood flow in an obstructed blood vessel;

(O) Emergency medical service regions—the six (6) regions in the state of Missouri that are defined in 19 CSR 30-40.302;

(P) Hospital—an establishment as defined by section 197.020.2.,

RSMo, or a hospital operated by the state;

(Q) Immediately available (IA)—being present at the bedside at the time of the patient's arrival at the hospital when prior notification is possible and no more than twenty (20) minutes from the hospital under normal driving and weather conditions;

(R) In-house (IH)—being on the hospital premises twenty-four (24) hours a day;

(S) Lytic therapy (also known as fibrinolysis/thrombolysis)—a drug therapy used to dissolve clots blocking flow in a blood vessel. It refers to drugs used for that purpose, including recombinant tissue plasminogen activator. This type of therapy can be used in the treatment of acute ischemic stroke and acute myocardial infarction;

(T) Missouri stroke registry—a statewide data collection system comprised of key data elements as defined in 19 CSR 30-40.730 that are used to compile and trend statistics of stroke patients in both pre-hospital and hospital settings, using a coordinated electronic reporting method provided by the department;

(U) Multidisciplinary team—a team of appropriate representatives of hospital units involved in the care of the stroke patient. This team supports the care of the stroke patient with the stroke team;

(V) Neuro-interventional team—a team of physicians, nurses, and other clinical staff, and technical support that perform the neuro-interventions and who are part of the stroke clinical team;

(W) Neurology service—an organizational component of the hospital specializing in the care of patients who have had strokes or some other neurological condition or disorder;

(X) Patient—an individual who is sick, injured, wounded, diseased, or otherwise incapacitated or helpless, or dead, excluding deceased individuals being transported from or between private or public institutions, homes, or cemeteries, and individuals declared dead prior to the time an ambulance is called for assistance;

(Y) Peer review system—the process the stroke center establishes for physicians to review stroke cases on patients who are admitted to the stroke center, transferred out of the stroke center, or die as a result of the stroke (independent of hospital admission or hospital transfer status);

(Z) Physician—a person licensed as a physician pursuant to Chapter 334, RSMo;

(AA) Promptly available (PA)—arrival at the hospital at the patient's bedside within thirty (30) minutes after notification of a patient's arrival at the hospital;

(BB) Protocol—a predetermined, written medical care guideline, which may include standing orders;

(CC) Qualified individual—a physician, registered nurse, advanced practice registered nurse, and/or physician assistant licensed in the state of Missouri who demonstrates administrative ability and shows evidence of educational and clinical experience in the care of cerebrovascular patients;

(DD) Regional outcome data—data used to assess the regional process for pre-hospital, hospital, and regional patient outcomes;

(EE) Repatriation—the process used to return a stroke patient to his or her home community from a level I or level II stroke center after his or her acute treatment for stroke has been completed. This allows the patient to be closer to home for continued hospitalization or rehabilitation and follow-up care as indicated by the patient's condition;

(FF) Reperfusion—the process of restoring normal blood flow to an organ or tissue that has had its blood supply cut off, such as after an ischemic stroke or myocardial infarction;

(GG) Requirement (R)—a symbol used to indicate that a standard is a requirement for stroke center designation at a particular level;

(HH) Review—the inspection of a hospital to determine compliance with the rules of this chapter;

(II) Stroke—a sudden brain dysfunction due to a disturbance of cerebral circulation. The resulting impairments include, but are not limited to, paralysis, slurred speech, and/or vision loss. Ischemic strokes are typically caused by the obstruction of a cerebral blood vessel. Hemorrhagic strokes are typically caused by rupture of a

cerebral artery;

(JJ) Stroke call roster—a schedule that provides twenty-four (24) hours a day, seven (7) days a week neurology service coverage. The call roster identifies the physicians or qualified individuals on the schedule that are available to manage and coordinate emergent, urgent, and routine assessment, diagnosis, and treatment of the stroke patients;

(KK) Stroke care—emergency transport, triage and acute intervention, and other acute care services for strokes that potentially require immediate medical or surgical intervention or treatment, and may include education, primary prevention, acute intervention, acute and sub-acute management, prevention of complications, secondary stroke prevention, and rehabilitative services;

(LL) Stroke center—a hospital that is currently designated as such by the department to care for patients with a stroke.

1. A level I stroke center is a receiving center staffed and equipped to provide total care for every aspect of stroke care, including care for those patients with complications, that also functions as a resource center for the hospitals within that region, and conducts research.

2. A level II stroke center is a receiving center staffed and equipped to provide care for a large number of stroke patients within the region.

3. A level III stroke center is a referral center staffed and equipped to initiate lytic therapy and initiate timely transfer to a higher level of care. The level III stroke center also provides prompt assessment, indicated resuscitation, and appropriate emergency intervention for stroke patients. A level III stroke center may admit and monitor patients as in-patients if there are designated stroke beds and an established relationship exists with a level I or level II stroke center through which the level I or level II stroke center provides medical direction and oversight for those stroke patients kept at the level III stroke center under that relationship.

4. A level IV stroke center is a referral center in an area considered rural or where there are insufficient hospital resources to serve the patient population requiring stroke care. A level IV stroke center provides prompt assessment, indicated resuscitation, appropriate emergency intervention, and arranges and expedites transfer to a higher level stroke center as needed;

(MM) Stroke medical director—a physician designated by the hospital who is responsible for the stroke service and performance improvement and patient safety programs related to stroke care;

(NN) Stroke program—an organizational component of the hospital specializing in the care of stroke patients;

(OO) Stroke program manager/coordinator—a qualified individual designated by the hospital with responsibility for monitoring and evaluating the care of stroke patients and the coordination of performance improvement and patient safety programs for the stroke center in conjunction with the stroke medical director;

(PP) Stroke team—a component of the hospital stroke program consisting of the core stroke team and the clinical stroke team;

(QQ) Stroke unit—the functional division or facility of the hospital that provides care for stroke patients admitted to the stroke center;

(RR) Symptom onset-to-treatment time—the time from symptom onset to initiation of therapy to restore blood flow in an obstructed blood vessel;

(SS) Telemedicine—the use of medical information exchanged from one (1) site to another via electronic communications to improve patient's health status. A neurology specialist will assist the physician in the center in rendering a diagnosis. This may involve a patient "seeing" a specialist over a live, remote consult or the transmission of diagnostic images and/or video along with patient data to the specialist;

(TT) Thrombolytics—drugs, including recombinant tissue plasminogen activator, used to dissolve clots blocking flow in a blood vessel. These thrombolytic drugs are used in the treatment of acute ischemic stroke and acute myocardial infarction; and

(UU) Transfer agreement—a document which sets forth the rights and responsibilities of two (2) hospitals regarding the inter-hospital transfer of patients.

*AUTHORITY: section 192.006, RSMo 2000, and sections 190.185 and 190.241, RSMo Supp. 2012. Original rule filed Nov. 15, 2012.*

*PUBLIC COST: This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.*

*PRIVATE COST: This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate.*

*NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed rule with Teresa Generous, Director, Department of Health and Senior Services, Division of Regulation and Licensure, PO Box 570, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the Missouri Register. No public hearing is scheduled.*

**Title 19—DEPARTMENT OF HEALTH AND  
SENIOR SERVICES  
Division 30—Division of Regulation and Licensure  
Chapter 40—Comprehensive Emergency Medical  
Services Systems Regulations**

**PROPOSED RULE**

**19 CSR 30-40.720 Stroke Center Designation Application and Review**

*PURPOSE: This rule establishes the requirements for participation in Missouri's stroke center program.*

(1) Participation in Missouri's stroke center program is voluntary and no hospital shall be required to participate. No hospital shall hold itself out to the public as a state-designated stroke center unless it is designated as such by the Department of Health and Senior Services (department). Hospitals desiring stroke center designation shall apply to the department. Only those hospitals found by review to be in compliance with the requirements of the rules of this chapter shall be designated by the department as stroke centers.

(A) An application for stroke center designation shall be made upon forms prepared or prescribed by the department and shall contain information the department deems necessary to make a fair determination of eligibility for review and designation in accordance with the rules of this chapter. The stroke center review and designation application form, included herein, is available at the Health Standards and Licensure (HSL) office, or online at the department's website at [www.health.mo.gov](http://www.health.mo.gov), or may be obtained by mailing a written request to the Missouri Department of Health and Senior Services, HSL, PO Box 570, Jefferson City, MO 65102-0570. The application for stroke center designation shall be submitted to the department no less than sixty (60) days and no more than one hundred twenty (120) days prior to the desired date of the initial designation or expiration of the current designation.

(B) Both sections A and B of the stroke center review and designation application form, included herein, shall be complete before the department will arrange a date for the review. The department shall notify the hospital/stroke center of any apparent omissions or errors in the completion of the stroke center review and designation application form. When the stroke center review and designation application form is complete, the department shall contact the hospital/stroke center to arrange a date for the review.

(C) The hospital/stroke center shall cooperate with the department

in arranging for a mutually suitable date for any announced reviews.

(D) The hospital/stroke center may request any announced initial and validation reviews by the department be coordinated with the hospital's/stroke center's Joint Commission Stroke Center Survey, if applicable. The department may grant such a request to the extent practical.

(2) The different types of site reviews to be conducted on hospitals/stroke centers seeking stroke center designation include:

(A) An initial review shall occur on a hospital applying to be initially designated as a stroke center. An initial review shall include interviews with designated hospital staff, a review of the physical plant and equipment, and a review of records and documents as deemed necessary to assure compliance with the requirements of the rules of this chapter;

(B) A validation review shall occur on a designated stroke center applying for renewal of its designation as a stroke center. Validation reviews shall occur no less than every four (4) years. A validation review shall include interviews with designated stroke center staff, a review of the physical plant and equipment, and a review of records and documents as deemed necessary to assure compliance with the requirements of the rules of this chapter; and

(C) A focus review shall occur on a designated stroke center in which a validation review was conducted and substantial deficiency(ies) were cited. A review of the physical plant will not be necessary unless a deficiency(ies) was cited in the physical plant in the preceding validation review. The focus review team shall be comprised of a representative from the department and may include a qualified contractor(s) with the required expertise to evaluate corrections in areas where deficiencies were cited.

(3) Stroke center designation shall be valid for a period of four (4) years from the date the stroke center/hospital is designated.

(A) Stroke center designation shall be site specific and non-transferable when a stroke center changes location.

(B) Once designated as a stroke center, a stroke center may voluntarily surrender the designation at any time without giving cause, by contacting the department in writing. In these cases, the application and review process shall be completed again before the designation may be reinstated.

(4) For the purpose of reviewing previously designated stroke centers and hospitals applying for stroke center designation, the department shall use review teams consisting of qualified contractors. These review teams shall consist of one (1) stroke coordinator or stroke program manager who has experience in stroke care and one (1) emergency medicine physician also experienced in stroke care. The review team shall also consist of at least one (1) and no more than two (2) neurologist(s)/neuro-interventionalist(s) who are experts in stroke care. One (1) representative from the department will also be a participant of the review team. This representative shall coordinate the review with the hospital/stroke center and the other review team members.

(A) Any individual interested in becoming a qualified contractor to conduct reviews shall—

1. Send the department a curriculum vitae (CV) or resume that includes his or her experience and expertise in stroke care and whether an individual is in good standing with his or her licensing boards. A qualified contractor shall be in good standing with his or her respective licensing boards;

2. Provide the department evidence of his or her previous site survey experience (state and/or national designation survey process); and

3. Submit a list to the department that details any ownership he or she may have in a Missouri hospital(s), whether he or she has been terminated from any Missouri hospital(s), any lawsuits he or she has currently or had in the past with any Missouri hospital(s), and any Missouri hospital(s) for which his or her hospital privileges

have been revoked.

(B) Qualified contractors for the department shall enter into a written agreement with the department indicating, that among other things, they agree to abide by Chapter 190, RSMo, and the rules in this chapter, during the review process.

(5) Out-of-state review team members shall conduct levels I and II hospital/stroke center reviews. Review team members are considered out-of-state review team members if they work outside of the state of Missouri. In-state review team members may conduct levels III and IV hospital/stroke center reviews. Review team members are considered in-state review team members if they work in the state of Missouri. In the event that out-of-state reviewers are unavailable, levels I and II stroke center reviews may be conducted by in-state reviewers from Emergency Medical Services (EMS) regions as set forth in 19 CSR 30-40.302 other than the region being reviewed with the approval of the director of the department or his/her designee. When utilizing in-state review teams, levels I and II hospital/stroke centers shall have the right to refuse one (1) in-state review team or certain members from one (1) in-state review team.

(6) Hospitals/stroke centers shall be responsible for paying expenses related to the cost of the qualified contractors to review their respective hospitals/stroke centers during initial, validation, and focus reviews. The department shall be responsible for paying the expenses of its representative. Costs of the review to be paid by the hospital/stroke center include:

(A) An honorarium shall be paid to each qualified contractor of the review team. Qualified contractors of the review team for level I and II stroke center reviews shall be paid six hundred dollars (\$600) for the day of travel per reviewer and eight hundred fifty dollars (\$850) for the day of the review per reviewer. Qualified contractors of the review team for level III and IV stroke center reviews shall be paid five hundred dollars (\$500) for the day of travel per reviewer and five hundred dollars (\$500) for the day of the review per reviewer. This honorarium shall be paid to each qualified contractor of the review team at the time the site survey begins;

(B) Airfare shall be paid for each qualified contractor of the review team, if applicable;

(C) Lodging shall be paid for each qualified contractor of the review team. The hospital/stroke center shall secure the appropriate number of hotel rooms for the qualified contractors and pay the hotel directly; and

(D) Incidental expenses, if applicable, for each qualified contractor of the review team shall not exceed two hundred fifty dollars (\$250) and may include the following:

1. Airport parking;
2. Checking bag charges;
3. Meals during the review; and

4. Mileage to and from the review if no airfare was charged by the reviewer. Mileage shall be paid at the federal mileage rate for business miles as set by the Internal Revenue Service (IRS). Federal mileage rates can be found at the website [www.irs.gov](http://www.irs.gov).

(7) Upon completion of a review, the qualified contractors from the review team shall submit a report of their findings to the department. This report shall state whether the specific standards for stroke center designation have or have not been met and if not met, in what way they were not met. This report shall detail the hospital/stroke center's strengths, weaknesses, deficiencies, and recommendations for areas of improvement. This report shall also include findings from patient chart audits and a narrative summary of the following areas: prehospital, hospital, stroke service, emergency department, operating room, angiography suites, recovery room, clinical lab, intensive care unit, rehabilitation, performance improvement and patient safety programs, education, outreach, research, chart review, and interviews. The department shall have the final authority to determine compliance with the rules of this chapter.

(8) The department shall return a copy of the report to the chief executive officer, the stroke medical director, and the stroke program manager/coordinator of the hospital/stroke center reviewed. Included within the report shall be notification indicating whether the hospital/stroke center has met the criteria for stroke center designation or has failed to meet the criteria for the stroke center designation requested. Also, if a focus review of the stroke center is required, the time frame for this focus review will be shared with the chief executive officer, the stroke medical director and the stroke program manager/coordinator of the stroke center reviewed.

(9) When the hospital/stroke center is found to have deficiencies, the hospital/stroke center shall submit a plan of correction to the department. The plan of correction shall include identified deficiencies, actions to be taken to correct deficiencies, time frame in which the deficiencies are expected to be resolved, and the person responsible for the actions to resolve the deficiencies. A plan of correction form shall be completed by the hospital and returned to the department within thirty (30) days after notification of review findings and designation. If a focus review is required, then the stroke center shall be allowed a minimum period of six (6) months to correct deficiencies.

(10) A stroke center shall make the department aware in writing within thirty (30) days if there are any changes in the stroke center's name, address, contact information, chief executive officer, stroke medical director, or stroke program manager/coordinator.

(11) Any person aggrieved by an action of the Department of Health and Senior Services affecting the stroke center designation pursuant to Chapter 190, RSMo, including the revocation, the suspension, or the granting of, refusal to grant, or failure to renew a designation, may seek a determination thereon by the Administrative Hearing Commission under Chapter 621, RSMo. It shall not be a condition to such determination that the person aggrieved seek reconsideration, a rehearing, or exhaust any other procedure within the department.

(12) The department may deny, place on probation, suspend, or revoke such designation in any case in which it has reasonable cause to believe that there has been a substantial failure to comply with the provisions of Chapter 190, RSMo, or any rules or regulations promulgated pursuant to this chapter. If the Department of Health and Senior Services has reasonable cause to believe that a hospital is not in compliance with such provisions or regulations, it may conduct additional announced or unannounced site reviews of the hospital to verify compliance. If a stroke center fails two (2) consecutive on-site reviews because of substantial noncompliance with standards prescribed by sections 190.001 to 190.245, RSMo, or rules adopted by the department pursuant to sections 190.001 to 190.245, RSMo, its center designation shall be revoked.



MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES  
SECTION OF HEALTH STANDARDS AND LICENSURE  
**APPLICATION FOR STROKE CENTER REVIEW AND DESIGNATION**

<b>SECTION A</b>			
In accordance with the requirements of the Chapter 190 RSMo and the applicable regulations, this application is hereby submitted for review and designation as a stroke center. Please complete all information applicable to the requested designation level.			<b>Designation Level Requested</b> <input type="checkbox"/> I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV
<b>HOSPITAL INFORMATION</b>			
Name Of Hospital (Name To Appear On Designation Certificate )		Telephone Number	
Address (Street And Number)		City	Zip Code
<b>PROFESSIONAL INFORMATION</b>			
Chief Executive Officer		Chairman/President Of Board Of Trustees	
Stroke Medical Director		Stroke Program Manager	
Medical Director of Emergency Medicine		Medical Director of Intensive Care Unit	
<b>RESOURCE INFORMATION</b>			
Stroke Caseload	Stroke Team Activations	CT Scan Capability <input type="checkbox"/> FULL <input type="checkbox"/> PARTIAL <input type="checkbox"/> NONE	MRI Capability <input type="checkbox"/> FULL <input type="checkbox"/> PARTIAL <input type="checkbox"/> NONE
Neurosurgical Capability or Transfer Plan	ICU or NICU Beds	Stroke Unit Beds	Stroke Rehab <input type="checkbox"/> INPATIENT <input type="checkbox"/> OUTPATIENT
Neurologists	Neurosurgeons	Neuro-Interventionalists	Emergency Department (ED) Physicians
Anesthesiologists/ CRNAs & AAs	Angiography Suites	Avg number of patients who received neuro-intervention (not required for initial review)	Avg number of patients who received thrombolytics in the past 24 months (not required for initial review)
<b>CERTIFICATION</b>			
<p>We, the undersigned, hereby certify that the information provided in this application for stroke center review and designation is true and accurate; and give assurance of the intent and ability of the hospital to comply with regulations promulgated under the Chapter 190, RSMo.</p> <p>We further certify that the hospital will comply with all recommendations for improvement contained in the stroke center site review reports prepared by the Missouri Department of Health and Senior Services.</p> <p>Date of application _____</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 45%;"> <p>Signed _____</p> <p>Chairman/President of Board of Trustees, Owner, or one Partner of Partnership</p> </div> <div style="width: 45%;"> <p>Signed _____</p> <p>Hospital Chief Executive Officer</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 45%;"> <p>Signed _____</p> <p>Stroke Medical Director</p> </div> <div style="width: 45%;"> <p>Signed _____</p> <p>Director of Emergency Medicine</p> </div> </div>			

MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES  
SECTION OF HEALTH STANDARDS AND LICENSURE  
**APPLICATION FOR STROKE CENTER REVIEW AND DESIGNATION**

**SECTION B**

Please attach the following documentation to the application form. **Name of Hospital:**

- ☐ Hospital organizational chart depicting the relationship of the stroke services to other services and defining the organizational structure of the stroke service.
- ☐ Job descriptions and CV for the stroke medical director and stroke coordinator/program manager.
- ☐ A narrative description of the administrative commitment for the stroke center, including how stroke center designation relates to the overall mission of the hospital.
- ☐ A current board resolution supporting the stroke center.
- ☐ A narrative description of the catchment area for the stroke center.
- ☐ A narrative description of the prehospital system including the hospital's participation in medical control, quality assurance, and education of the emergency medicine personnel.
- ☐ Hospital diversion policy.
- ☐ List of the stroke medical director and stroke program coordinator or program manager (core stroke team) indicating the neuro-cerebrovascular related continuing education for each over the past three (3) years. (Do not send continuing education information about the clinical stroke team. This should be available at the time of the review.)
- ☐ Multidisciplinary team policy.
- ☐ List of all neurologists, neurosurgeons, neuro-interventionalists and emergency department physicians and indicate stroke-related CME for each over the past three (3) years.
- ☐ List of physicians and plan for supervised relationship between Level III and higher level stroke center where stroke patients are admitted for care in a Level III center if applicable (this list and plan are only required for Level III centers with a supervised relationship with a Level I or Level II center).
- ☐ Narrative description of the system for notifying/activating stroke team.
- ☐ One-call stroke team activation protocol.
- ☐ Copies of all transfer agreements pertaining to stroke.
- ☐ Policy for consultation for physical medicine and rehabilitation, physical therapy, occupational therapy and speech therapy.
- ☐ Protocols on post-discharge and post-transfer follow-up for stroke patients.
- ☐ A narrative description of the stroke quality improvement (QI) processes utilized by the hospital (Do not send copies of QI minutes or documents. These should be available at the time of review.)
- ☐ Examples of stroke-related educational, outreach, and research projects undertaken by the hospital.
- ☐ Summary of source of stroke information for Table 1 on next page. Table 1 is only required to be filled out by a stroke center which is applying for renewal of its designation prior to a validation review. Table 1 is not required to be filled out by a hospital requesting an initial review and designation.



MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES  
SECTION OF HEALTH STANDARDS AND LICENSURE  
APPLICATION FOR STROKE CENTER REVIEW AND DESIGNATION

<b>Table 1. Ischemic Stroke Numbers for Past Two (2) Years</b> Table 1 is only required to be filled out by a stroke center which is applying for renewal of its designation prior to a validation review.				
A	B	C	D	E
Indicate year <sup>1</sup> Provide two years of data	Stroke cases <sup>2</sup>	Stroke cases eligible for NI <sup>4</sup>	Stroke cases eligible for Lytics <sup>6</sup>	Stroke deaths <sup>8</sup>
	Transfers <sup>3</sup>	Received NI <sup>5</sup>	Received lytics <sup>7</sup>	
For example:	53	14	25	2
2011	22	8	12	
Total				
Average/Year				

<sup>1</sup> Include data for the last two (2) years of hospital data. Indicate time frame in months if it is other than January to December.

<sup>2</sup> Include all stroke patients, independent of hospital admission or hospital transfer status. To include walk-ins, transfers, EMS transports, admitted patients, and patients that die. Include all stroke patients that have ICD-9-principal diagnosis code of 433.01, 433.10, 433.11, 433.21, 433.31, 433.81, 433.91, 434.00, 434.01, 434.11, 434.91, 436.00, 430.00 and 431.00

<sup>3</sup> Provide number of all stroke patients transferred to this hospital from another hospital.

<sup>4</sup> Provide number of stroke patients eligible for neuro-intervention (NI).

<sup>5</sup> Provide number of stroke patients that received neuro-intervention (NI).

<sup>6</sup> Provide number of stroke patients that are eligible for thrombolytics.

<sup>7</sup> Provide number of stroke patients that received thrombolytics.

<sup>8</sup> Include all deaths, ED and inpatient, independent of hospital admission or hospital transfer status.

*AUTHORITY:* section 192.006, RSMo 2000, and sections 190.185 and 190.241, RSMo Supp. 2012. Original rule filed Nov. 15, 2012.

*PUBLIC COST:* This proposed rule will cost state agencies or political subdivisions three hundred eighty-seven thousand seven hundred forty dollars (\$387,740) for the initial five- (5-) year period and one hundred nineteen thousand nine hundred forty dollars (\$119,940) annually thereafter.

*PRIVATE COST:* This proposed rule will cost private entities two hundred ten thousand five hundred sixty dollars (\$210,560) for the initial five- (5-) year period and one hundred nineteen thousand seven hundred dollars (\$119,700) annually thereafter.

*NOTICE TO SUBMIT COMMENTS:* Anyone may file a statement in support of or in opposition to this proposed rule with Teresa Generous, Director, Division of Regulation and Licensure, Missouri Department of Health and Senior Services, PO Box 570, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the **Missouri Register**. No public hearing is scheduled.



**FISCAL NOTE  
PUBLIC COST**

- I. Department Title: Missouri Department of Health and Senior Services  
Division Title: Division of Regulation and Licensure  
Chapter Title: Chapter 40-Comprehensive Emergency Medical Services System**

<b>Rule Number and Name:</b>	<b>19 CSR 30-40.720 Stroke Center Designation Requirements.</b>
<b>Type of Rulemaking:</b>	<b>Proposed</b>

**II. SUMMARY OF FISCAL IMPACT**

Affected Agency or Political Subdivision	Estimated Cost of Compliance in the Aggregate
<b>18 public hospitals</b>	<b>\$93,240 for the initial five year period and \$61,040 annually thereafter.</b>
<b>Department of Health and Senior Services' costs</b>	<b>\$294,500 for the initial five year period and \$58,900 annually thereafter.</b>
<b>Total</b>	<b>\$387,740 for the initial five year period and \$119,940 annually thereafter.</b>

**III. WORKSHEET**

**1. Honorariums.**

- A. For level one and two designated stroke centers during the initial five year period- \$600 for the day of travel per reviewer + \$850 for the day of the review per reviewer X four reviewers at the most= \$5,800.  
\$5,800 X two level one/two initial reviews= \$11,600.  
\$5,800 X one level one/two validation review= \$5,800.  
\$5,800 X one level one/two focus review= \$5,800.**

**\$11,600 + \$5,800 + \$5,800 = \$23,200 for the initial five year period for honorariums to be paid for reviews of level one/two designated stroke centers.**

**For level one and two designated stroke centers each year after the initial five year period-\$600 for the day of travel per reviewer + \$850 for the day of the review per reviewer X four reviewers at the most= \$5,800.**

**\$5,800 X one level one/two initial review= \$5,800.  
\$5,800 X two level one/two validation reviews= \$11,600.  
\$5,800 X one level one/two focus review=\$5,800.**

**\$5,800 + \$11,600 + \$5,800 = \$23,200 for each year after the initial five year period for honorariums to be paid for reviews of level one/two designated stroke centers.**

- B. For level three and four designated stroke centers during the initial five year period- \$500 for the day of travel per reviewer + \$500 for the day of review per reviewer X four reviewers at the most = \$4,000.**

**\$4000 X four level three/four initial reviews= \$16,000.**

**\$4000 X four level three/four validation review= \$16,000.**

**\$4000 X one level three/four focus review= \$4,000.**

**\$16,000+\$16,000+\$4,000 = \$36,000 for the initial five year period for honorariums to be paid for reviews of level three/four designated stroke centers.**

**For level three and four designated stroke centers during each year after the initial five year period- \$500 for the day of travel per reviewer + \$500 for the day of the review per reviewer X four reviewers at the most = \$4,000.**

**\$4,000 X one level three/four initial review= \$4,000.**

**\$4,000 X two level three/four validation reviews= \$8,000.**

**\$4,000 X one level three/four focus review= \$4,000.**

**\$4,000+\$8,000+\$4,000 = \$16,000 total honorariums for each year after the initial five year period for level three/four designated stroke centers.**

#### **Total Honorariums-**

**\$23,200 (level one/two designated stroke centers for the initial five year period) + \$36,000 (level three/four designated stroke centers for the initial five year period)= \$59,200 total for level one/two/three/four designated stroke centers for the initial five year period.**

**\$23,200 (level one/two designated stroke centers for each year after the initial five year period)+ \$16,000 (level three/four designated stroke centers for each year after the initial five year period)= \$39,200 total for level one/two/three/four designated stroke centers for each year after the initial five year period.**

## **2. Airfare-**

**For the initial five year period- \$400 per reviewer X four reviewers at the most= \$1,600 X four level one/two reviews during the initial five year period= \$6,400.**

**For each year after the initial five year period- \$400 per reviewer X four reviewers at the most = \$1,600 X four reviews each year after the initial five year period= \$6,400.**

**3. Mileage-**

For the initial five year period- 500 miles per reviewer X \$0.51 X four reviewers at the most= \$1020 X nine level three/four reviews during the initial five year period= \$9,180.

For each year after the initial five year period- 500 miles per reviewer X \$0.51 X four reviewers at the most= \$1,020 X four level three/four reviews during each year after the initial five year period=\$4,080.

**4. Lodging-**

For the initial five year period- \$105 per reviewer X four reviewers at the most= \$420 X 13 reviews during the initial five year period= \$5,460.

For each year after the initial five year period- \$105 per reviewer X four reviewers at the most=\$420 X eight reviews each year after the initial five year period= \$3,360.

**5. Incidental expenses for the initial five year period- \$250 per reviewer X four reviewers at the most= \$1,000 X 13 reviews during the initial five year period= \$13,000.**

For each year after the initial five year period- \$250 per reviewer X four reviewers at the most= \$1,000 X eight reviews each year after the initial five year period= \$8,000.

**6. Department of Health and Senior Services' costs for staff liaison -**

**For the first five year period -**

Salary and benefits - \$80,000 X five years = \$400,000 divided by 2 because staff liaison also works with the ST Segment Elevation Myocardial Infarction (STEMI) program for STEMI designated centers = \$200,000

Indirect costs - \$20,000 X five years = \$100,000 divided by 2 because staff liaison also works with the STEMI program for STEMI designated centers = \$50,000

Network costs - \$2,200 X five years = \$11,000 divided by 2 because staff liaison also works with the STEMI program for STEMI designated centers = \$5,500

Mileage - 500 miles X .37 rate X twenty reviews/visits to hospitals average each year X five years = \$18,500

Lodging - \$105.00 X twenty reviews/visits to hospitals average each year X five years = \$10,500

Incidental expenses such as food - \$100 X twenty reviews/visits to hospitals average each year X five years = \$10,000

**Total - \$294,500 for the first five year period.**

**For each year after the initial five year period -**

Salary and benefits - \$80,000 X one year = \$80,000 divided by 2 because staff liaison also works with the ST Segment Elevation Myocardial Infarction (STEMI) program for STEMI designated centers = \$40,000

Indirect costs - \$20,000 X one year = \$20,000 divided by 2 because staff liaison also works with the STEMI program for STEMI designated centers = \$10,000

Network costs - \$2,200 X one year = \$2,200 divided by 2 because staff liaison also works with the STEMI program for STEMI designated centers = \$1,100

Mileage - 500 miles X .37 rate X twenty reviews/visits to hospitals average each year X one year = \$3,700

Lodging - \$105.00 X twenty reviews/visits to hospitals average each year X one year = \$2,100

Incidental expenses such as food - \$100 X twenty reviews/visits to hospitals average each year X one year = \$2,000

Total - \$58,900 for each year after the initial five year period.

Total -

For the initial five year period- \$59,200 (honorariums) + \$6,400 (airfare) + \$9,180 (mileage) + \$5,460 (lodging) + \$13,000 (incidental expenses) + \$294,500 (DHSS staff member liaison costs) = \$387,740 for the initial five year period.

For each year after the five year period- \$39,200 (honorariums) + \$6,400 (airfare) + \$4,080 (mileage) + \$3,360 (lodging) + \$8,000 (incidental expenses) + \$58,900 (DHSS staff member liaison costs) = \$119,940 annually thereafter.

#### IV. ASSUMPTIONS

There is one unlicensed public hospital in Missouri and 17 licensed public hospitals in Missouri. All of these public hospitals have the potential to apply for designation as a level one, two, three or four stroke center. Stroke center designation is valid for a period of four years from the date the stroke center/hospital is designated.

It is anticipated that there will be at least six public hospitals applying to become designated stroke centers during the first five year period as the interest expressed to the Department about hospitals becoming designated stroke centers has been very positive. It is anticipated that two of the public hospitals applying to become a stroke designated center during the first five year period will be requesting a level one or level two designation and four public hospitals will be requesting to become a level three or level four designated stroke center during the first five year period. Similarly, during the first five years, there will be at least five public hospitals requiring a validation review at the end of the four year designation period in order to become designated as a stroke center again. It is anticipated that one of the public hospitals requesting a validation review will be a level one or level two designated stroke center and four public hospitals requiring a validation review will be level three or level four designated stroke centers. Finally, there will be an average of two focus reviews during the first five years. Focus reviews for the trauma designated centers, a designation process the Department has had in place for greater than ten years, have been required infrequently. It is anticipated one of the focus reviews will be with a level one or level two designated stroke center and

the other focus review will be conducted on a level three or level four designated stroke center.

After the first five years, the Department anticipates one level one or level two public hospital will request an initial review each year after the initial five year period and one level three or level four public hospital will request an initial review each year after the initial five year period. The Department anticipates two level one or level two designated stroke centers will require a validation review each year after the initial five year period and two level three or level four designated stroke centers will require a validation review each year after the initial five year period. Finally, the Department anticipates one level one or level two designated stroke center will require a focus review each year after the initial five year period and one level three or level four designated stroke center will require a focus review each year after the initial five year period.

The review teams will have at the most four reviewers.

Reviewers of level one and level two trauma designated centers have been receiving approximately \$1450 for honorariums. Reviewers of level three trauma designated centers have been receiving approximately \$1000 for honorariums. The Department used these numbers for the reviewers of stroke designated centers too.

Only reviewers for level one and level two stroke designated centers will incur airfare charges because reviewers for level three and level four stroke designated centers are in-state reviewers.

The airfare charge of \$400 per reviewer is an estimate found by looking at airfares on airline websites. This airfare charge is for a coach reservation on a roundtrip flight.

The mileage rate is figured by the federal business rate from the Internal Revenue Service which is currently \$0.51.

The estimate of 500 miles is an average to drive from the outermost points north to south or east to west in Missouri.

The mileage estimate is figured only with level three and level four designated stroke center reviews as these will all be in-state reviewers.

The lodging costs of \$105.00 per reviewer is based on the current state reimbursement rate for St. Louis hotels.

The Department has placed a maximum of \$250.00 for the reimbursement of incidental expenses by reviewers.

Costs related to the Department's liaison are expected to increase with inflation.

The mileage rate for the Department's liaison is \$.37 which is the current state rate of reimbursement.

Incidental expenses for the Department's liaison will mostly be for food/meal reimbursement.

FISCAL NOTE  
PRIVATE COST

- I. Department Title: Missouri Department of Health and Senior Services**  
**Division Title: Division of Regulation and Licensure**  
**Chapter Title: Chapter 40-Comprehensive Emergency Medical Services System**

<b>Rule Number and Title:</b>	<b>19 CSR 30-40.720 Stroke Center Designation Requirements.</b>
<b>Type of Rulemaking:</b>	<b>Proposed</b>

**II. SUMMARY OF FISCAL IMPACT**

Estimate of the number of entities by class which would likely be affected by the adoption of the rule:	Classification by types of the business entities which would likely be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
<b>148</b>	<b>Private hospitals</b>	<b>\$210,560 for the initial five year period and \$119,700 annually thereafter.</b>

**III. WORKSHEET****1. Honorariums.**

- A. For level one and two designated stroke centers during the initial five year period- \$600 for the day of travel per reviewer + \$850 for the day of the review per reviewer X four reviewers at the most= \$5,800.**  
**\$5,800 X four level one/two initial reviews= \$23,200.**  
**\$5,800 X four level one/two validation reviews= \$23,200.**  
**\$5,800 X two level one/two focus reviews= \$11,600.**

**\$23,200 + \$23,200 + \$11,600 = \$58,000 for the initial five year period for honorariums to be paid for reviews of level one/two designated stroke centers.**

**For level one and two designated stroke centers each year after the initial five year period-\$600 for the day of travel per reviewer + \$850 for the day of the review per reviewer X four reviewers at the most= \$5,800.**

**\$5,800 X two level one/two initial reviews= \$11,600.**

**\$5,800 X three level one/two validation reviews=\$17,400.**

**\$5,800 X two level one/two focus reviews=\$11,600.**

**\$11,600 + \$17,400 + \$11,600 = \$40,600 for each year after the initial five year period for honorariums to be paid for reviews of level one/two designated stroke centers.**

- B. For level three and four designated stroke centers during the initial five year period- \$500 for the day of travel per reviewer + \$500 for the day of review per reviewer X four reviewers at the most = \$4,000.**

**\$4000 X eight level three/four initial reviews= \$32,000.**

**\$4000 X eight level three/four validation reviews= \$32,000.**

**\$4000 X three level three/four focus reviews= \$12,000.**

**\$32,000 + \$32,000 + \$12,000=\$76,000 for the initial five year period for honorariums to be paid for reviews of level three/four designated stroke centers.**

**For level three and four designated stroke centers during each year after the initial five year period- \$500 for the day of travel per reviewer + \$500 for the day of the review per reviewer X four reviewers at the most = \$4,000.**

**\$4,000 X two level three/four initial reviews= \$8,000.**

**\$4,000 X five level three/four validation reviews= \$20,000.**

**\$4,000 X two level three/four focus reviews= \$8,000.**

**\$8,000+\$20,000+\$8,000= \$36,000 total honorariums for each year after the initial five year period for level three/four designated stroke centers.**

**Total Honorariums-**

**\$58,000 (level one/two designated stroke centers for the initial five year period) + \$76,000 (level three/four designated stroke centers for the initial five year period)= \$134,000 total for level one/two/three/four designated stroke centers for the initial five year period.**

**\$40,600 (level one/two designated stroke centers for each year after the initial five year period) + \$36,000 (level three/four designated stroke centers for each year after the initial five year period)= \$76,600 total for level one/two/three/four designated stroke centers for each year after the initial five year period.**

**2. Airfare-**

For the initial five year period- \$400 per reviewer X four reviewers at the most= \$1600 X 10 level one/two reviews during the initial five year period = \$16,000.

For each year after the initial five year period- \$400 per reviewer X four reviewers at the most = \$1,600 X seven reviews each year after the initial five year period = \$11,200.

**3. Mileage-**

For the initial five year period- 500 miles per reviewer X \$0.51 X four reviewers at the most= \$1,020 X 19 level three/four reviews during the initial five year period= \$19,380.

For each year after the initial five year period- 500 miles per reviewer X \$0.51 X four reviewers at the most = \$1,020 X nine level three/four reviews during each year after the initial five year period = \$9,180.

**4. Lodging-**

For the initial five year period- \$105 per reviewer X four reviewers at the most = \$420 X 29 reviews during the initial five year period = \$12,180.

For each year after the initial five year period- \$105 per reviewer X four reviewers at the most = \$420 X 16 reviews each year after the initial five year period = \$6,720.

**5. Incidental expenses for the initial five year period- \$250 per reviewer X four reviewers at the most= \$1,000 X 29 reviews during the initial five year period = \$29,000**

For each year after the initial five year period- \$250 per reviewer X four reviewers at the most = \$1,000.00 X 16 reviews each year after the initial five year period= \$16,000.

**Total-**

For the initial five year period- \$134,000 (honorariums) + \$16,000 (airfare) + \$19,380 (mileage) + \$12,180 (lodging) + \$29,000 (incidental expenses) = \$210,560.

For each year after the five year period- \$76,600 (honorariums) + \$11,200 (airfare) + \$9,180 (mileage) + \$6,720 (lodging) + \$16,000 (incidental expenses) = \$119,700.



#### **IV. ASSUMPTIONS**

**There are 148 private licensed hospitals in Missouri. All of these private hospitals have the potential to apply for designation as a level one, two, three or four stroke center. Stroke center designation is valid for a period of four years from the date the stroke center/hospital is designated.**

**It is anticipated that there will be at least twelve private hospitals on average applying to become a designated stroke center (level one, level two, level three or level four) during the first five year period as the interest expressed to the Department about hospitals becoming designated stroke centers has been very positive. It is anticipated that four of the private hospitals applying to become a stroke designated center each year will be requesting a level one or level two designation and eight private hospitals will be requesting to become a level three or level four designated stroke center during this five year period. Similarly, during the first five years, there will be at least twelve private hospitals requiring a validation review at the end of the four year designation period in order to become designated as a stroke center again. It is anticipated that four of the private hospitals requesting a validation review will be a level one or level two designated stroke center and eight private hospitals requiring a validation review will be a level three or level four designated stroke center. Finally, there will be an average of five focus reviews during the first five years. Focus reviews for the trauma designated centers, a designation process the Department has had in place for greater than ten years, have been required infrequently. It is anticipated two of the focus reviews will be with a level one or level two designated stroke center and three focus reviews will be conducted on a level three or level four designated stroke center.**

**After the first five years, the Department anticipates two level one or level two private hospitals will request an initial review each year after the initial five year period and two level three or level four private hospitals will request an initial review each year after the initial five year period. The Department anticipates three level one or level two designated stroke centers will require a validation review each year after the initial five year period and five level three or level four designated stroke centers will require a validation review after the initial five year period. Finally, the Department anticipates two level one or level two designated stroke centers will require a focus review each year after the initial five year period and two level three or level four designated stroke centers will require a focus review each year after the initial five year period.**

**The review teams will have at the most four reviewers.**

**Reviewers of level one and level two trauma designated centers have been receiving approximately \$1450 for honorariums. Reviewers of level three trauma designated centers have been receiving approximately \$1000 for honorariums. The Department used these numbers for the reviewers of stroke designated centers too.**

**Only reviewers for level one and level two stroke designated centers will incur airfare charges because reviewers for level three and level four stroke designated centers are in-state reviewers.**

**The airfare charge of \$400 per reviewer is an estimate found by looking at airfares on airline websites. This airfare charge is for a coach reservation on a roundtrip flight.**

**The mileage rate is figured by the federal business rate from the Internal Revenue Service which is currently \$0.51.**

**The estimate of 500 miles is an average to drive from the outermost points north to south or east to west in Missouri.**

**The mileage estimate is figured only with level three and level four designated stroke center reviews as these will all be in-state reviewers.**

**The lodging costs of \$105.00 per reviewer is based on the current state reimbursement rate for St. Louis hotels.**

**The Department has placed a maximum of \$250.00 for the reimbursement of incidental expenses by reviewers.**

**Title 19—DEPARTMENT OF HEALTH AND  
SENIOR SERVICES  
Division 30—Division of Regulation and Licensure  
Chapter 40—Comprehensive Emergency Medical  
Services Systems Regulations**

**PROPOSED RULE**

**19 CSR 30-40.730 Standards for Stroke Center Designation**

*PURPOSE: This rule establishes standards for level I, II, III, and IV stroke center designation.*

*AGENCY NOTE:*

*I-R, II-R, III-R, or IV-R after a standard indicates a requirement for level I, II, III, or IV stroke centers respectively.*

*I-IH, II-IH, III-IH, or IV-IH after a standard indicates an in-house requirement for level I, II, III, or IV-IH stroke centers respectively.*

*I-IA, II-IA, III-IA, or IV-IA indicates an immediately available requirement for level I, II, III, or IV stroke centers respectively.*

*I-PA, II-PA, III-PA, or IV-PA indicates a promptly available requirement for level I, II, III, or IV stroke centers respectively.*

*PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome and expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.*

(1) General Standards for Stroke Center Designation.

(A) The stroke center board of directors, administration, medical staff, and nursing staff shall demonstrate a commitment to quality stroke care. Methods of demonstrating the commitment shall include, but not be limited to, a board resolution that the hospital governing body agrees to establish policy and procedures for the maintenance of services essential for a stroke center; assure that all stroke patients will receive medical care at the level of the hospital's designation; commit the institution's financial, human, and physical resources as needed for the stroke program; and establish a priority admission for the stroke patient to the full services of the institution. (I-R, II-R, III-R, IV-R)

(B) Stroke centers shall agree to accept all stroke patients appropriate for the level of care provided at the hospital, regardless of race, sex, creed, or ability to pay. (I-R, II-R, III-R, IV-R)

(C) The stroke center shall demonstrate evidence of a stroke program. The stroke program shall be available twenty-four (24) hours a day, seven (7) days a week to evaluate and treat stroke patients. (I-R, II-R, III-R, IV-R)

1. The stroke center shall maintain a stroke team that at a minimum shall consist of—

A. A core team which provides administrative oversight and includes:

(I) A physician experienced in diagnosing and treating cerebrovascular disease (usually the stroke medical director); and (I-R, II-R, III-R, IV-R)

(II) At least one (1) other health care professional or qualified individual credentialed in stroke patient care (usually the stroke program manager/coordinator); (I-R, II-R, III-R, IV-R)

B. A stroke call roster that provides twenty-four (24) hours a day, seven (7) days a week neurology service coverage. The call roster identifies the physicians or qualified individuals on the schedule that are available to manage and coordinate emergent, urgent, and routine assessment, diagnosis, and treatment of stroke patients. A level I stroke center call roster shall include, but not be limited to, the emergency department physician, neuro-interventionalist, neuro-

logist, and others as appropriate. A level II stroke center call roster shall include, but not be limited to, the emergency department physician, a physician with experience and expertise in diagnosing and treating patients with cerebrovascular disease, and others as appropriate. The level III stroke center call roster shall include, but not be limited to, the emergency department physician and others as appropriate. A level IV stroke center call roster shall include, but not be limited to, the emergency department physician and other qualified individuals as appropriate. (I-R, II-R, III-R, IV-R)

(I) This coverage shall be available from notification of stroke patients according to the response requirements as set out below—

(a) Level I and II stroke centers shall have this coverage available within fifteen (15) minutes of notification of a stroke patient; and (I-R, II-R)

(b) Level III and IV stroke centers shall have a regional networking agreement with a level I or level II stroke center for telephone consult or telemedicine consultation available within fifteen (15) minutes of notification of a stroke patient; and (III-R, IV-R)

C. A clinical team appropriate to the center level designation that may include, but not be limited to, members of the stroke call roster, neurologists, physicians with expertise caring for stroke patients, neuro-interventionalists, neurosurgeons, anesthesiologists, intensivists, emergency department physicians, and other stroke center clinical staff as applicable. (I-R, II-R, III-R, IV-R)

2. The stroke center shall have a peer review system to review stroke cases respective of the stroke center's designation. (I-R, II-R, III-R, IV-R)

3. The stroke team members shall have appropriate experience to maintain skills and proficiencies to care for stroke patients. The stroke center shall maintain evidence that it meets the following requirements by documenting the following:

A. A list of all stroke team members; (I-R, II-R, III-R, IV-R)

B. Position qualifications and completion of continuing education requirements by stroke team members as set forth in sections (1), (2), and (4) of this rule; (I-R, II-R, III-R, IV-R)

C. Management of sufficient numbers of stroke patients by the stroke team members in order to maintain their stroke skills; (I-R, II-R, III-R, IV-R)

D. Participation by the core team and members of the stroke call roster in at least half of the regular, ongoing stroke program peer review system meetings as shown in meeting attendance documents. The stroke medical director shall disseminate the information and findings from the peer review system meetings to the stroke call roster members and the core team and document such dissemination; (I-R, II-R, III-R, IV-R)

E. Participation by stroke team members in at least half of the regular, ongoing stroke program performance improvement and patient safety meetings and documentation of such attendance in the meeting minutes and/or meeting attendance documents. The stroke medical director shall disseminate the information and findings from the performance improvement and patient safety meetings to the stroke team members and document such dissemination. If a stroke team member is unable to attend a stroke program performance improvement and patient safety meeting, then the stroke team member shall send an appropriate representative in his/her place; (I-R, II-R, III-R, IV-R)

F. Maintenance of skill levels in the management of stroke patients by the stroke team members as required by the stroke center and the stroke medical director and documentation of such continued experience; (I-R, II-R, III-R, IV-R)

G. Review of regional outcome data on quality of patient care by the stroke team members as part of the stroke center's performance improvement and patient safety process; and (I-R, II-R, III-R, IV-R)

H. Evidence of a written agreement between a level III stroke center and a level I or II stroke center when a level III stroke center

has a supervised relationship with a physician affiliated with a level I or II stroke center. A level III stroke center which provides lytic therapy to stroke patients may have an established plan for admitting and caring for stroke patients under a supervised relationship with a physician affiliated with a level I or II stroke center. This supervised relationship shall consist of a formally established and pre-planned relationship between the centers in which a physician from a level I or level II center supervises a physician in a level III center in the evaluation of a stroke patient for lytic therapy and the care of the patient post-lytic therapy in certain circumstances where that level III center does not transfer the patient to a higher level stroke center. In this setting, management decisions, including, but not limited to, administration of lytic therapy, transfer or non-transfer of patient, and post-lytic therapy shall be made jointly between the supervising and supervised physicians. Care protocols and pathways for patients that fall into this category shall be established by both parties at the outset of the establishment of the relationship. This supervised relationship shall be established by written agreement and detail the supervision of patient care. This written agreement may also include, but not be limited to, observation of patient care, review of level III stroke center's patient encounters, review of level III center's outcomes, evaluation of the level III center's process pertaining to stroke patients, and lytic therapy and guidance on methods to improve process, performance, and outcomes.

4. The stroke center shall maintain a multidisciplinary team, in addition to the stroke team, to support the care of stroke patients. (I-R, II-R, III-R, IV-R)

A. The multidisciplinary team shall include a suitable representative from hospital units as appropriate for care of each stroke patient. The hospital units represented on the multidisciplinary team may include, but not be limited to: administration, emergency medical services, intensive care unit, radiology, pharmacy, laboratory, stroke unit, stroke rehabilitation, and discharge planning. (I-R, II-R, III-R, IV-R)

B. The multidisciplinary team members or their representatives shall attend at least half of the stroke program performance improvement and patient safety program meetings which shall be documented in the meeting minutes and/or meeting attendance documents. (I-R, II-R, III-R, IV-R)

(D) A level I stroke center shall provide the services of a neuro-interventional laboratory staffed twenty-four (24) hours a day, seven (7) days a week.

1. The staff of the neuro-interventional laboratory, referred to as the neuro-interventional laboratory team, shall consist of at least the following:

A. Neuro-interventional specialist(s); and (I-R/PA)

B. Other clinical staff as deemed necessary. (I-R/PA)

2. The stroke center neuro-interventional laboratory team shall maintain core competencies annually as required by the stroke center. (I-R/PA)

3. The hospital credentialing committee shall document that the neuro-interventional specialist(s) have completed appropriate training and conducted sufficient neuro-interventional procedures. (I-R/PA)

4. The stroke center neuro-interventional laboratory team shall remain up to date in their continuing education requirements which are set forth in section (4) of this rule. (I-R/PA)

5. Resuscitation equipment shall be available in the neuro-interventional lab. (I-R)

(E) It is recommended that a level I stroke center meet the volume for stroke patient cases that is required for eligibility by The Joint Commission in its Advanced Certification of Comprehensive Stroke Centers as posted on January 31, 2012, which is incorporated by reference in this rule and is available at The Joint Commission, One Renaissance Boulevard, Oakbrook Terrace, IL 60181 or on The Joint Commission's website at [www.jointcommission.org](http://www.jointcommission.org). This rule does not incorporate any subsequent amendments or additions.

(F) The stroke center shall appoint a physician to serve as the stroke medical director. A stroke medical director shall be appointed

at all times with no lapses. (I-R, II-R, III-R, IV-R)

1. A level I stroke medical director shall have appropriate qualifications, experience, and training. A board-certified or board-admissible neurologist or other neuro-specialty trained physician is recommended. If the stroke medical director is board-certified or board-admissible, then one (1) of the following additional qualifications shall be met and documented. If the stroke medical director is not board-certified, then two (2) of the following additional qualifications shall be met and documented:

A. Completion of a stroke fellowship; (I-R)

B. Participation (as an attendee or faculty) in one (1) national or international stroke course or conference each year or two (2) regional or state stroke courses or conferences each year; or (I-R)

C. Five (5) or more peer-reviewed publications on stroke. (I-R)

2. A level II stroke medical director shall have appropriate qualifications, experience, and training. A board-certified or board-admissible physician with training and expertise in cerebrovascular disease is recommended. If the stroke medical director is board-certified or board-admissible, then one (1) of the following additional qualifications shall be met. If the stroke medical director is not board-certified, then two (2) of the following additional qualifications shall be met and documented:

A. Completion of a stroke fellowship; (II-R)

B. Participation (as an attendee or faculty) in one (1) national or international stroke course or conference each year or two (2) regional or state stroke courses or conferences each year; or (II-R)

C. Five (5) or more peer-reviewed publications on stroke. (II-R)

3. A level III and IV stroke medical director shall have the appropriate qualifications, experience, and training. A board-certified or board-admissible physician is recommended. If the stroke medical director is not board-certified or board-admissible, then the following additional qualifications shall be met and documented:

A. Complete a minimum of ten (10) hours of continuing medical education (CME) in the area of cerebrovascular disease every other year; and (III-R, IV-R)

B. Attend one (1) national, regional, or state meeting every three (3) years in cerebrovascular disease. Continuing medical education hours earned at these meetings can count toward the ten (10) required continuing medical education hours. (III-R, IV-R)

4. The stroke medical director shall meet the department's continuing medical education requirements for stroke medical directors as set forth in section (4) of this rule. (I-R, II-R, III-R, IV-R)

5. The stroke center shall have a job description and organizational chart depicting the relationship between the stroke medical director and the stroke center services. (I-R, II-R, III-R, IV-R)

6. The stroke medical director is encouraged to be a member of the stroke call roster. (I-R, II-R, III-R, IV-R)

7. The stroke medical director shall be responsible for the oversight of the education and training of the medical and clinical staff in stroke care. This includes a review of the appropriateness of the education and training for the practitioner's level of responsibility. (I-R, II-R, III-R, IV-R)

8. The stroke medical director shall participate in the stroke center's research and publication projects. (I-R)

(G) The stroke center shall have a stroke program manager/coordinator who is a registered nurse or qualified individual. The stroke center shall have a stroke program manager/coordinator at all times with no lapses. (I-R, II-R, III-R, IV-R)

1. The stroke center shall have a job description and organizational chart depicting the relationship between the stroke program manager/coordinator and the stroke center services. (I-R, II-R, III-R, IV-R)

2. The stroke program manager/coordinator shall—

A. Meet continuing education requirements as set forth in section (4) of this rule; and (I-R, II-R, III-R, IV-R)

B. Participate in the performance improvement and patient

safety program. (I-R, II-R, III-R, IV-R)

(H) The stroke center shall have a specific and well-organized system to notify and rapidly activate the stroke team to evaluate patients presenting at the stroke center with symptoms suggestive of an acute stroke. (I-R, II-R, III-R, IV-R)

(I) The stroke center shall have a one- (1-) call stroke team activation protocol. This protocol shall establish the following:

1. The criteria used to triage stroke patients shall include, but not be limited to, the time of symptom onset; (I-R, II-R, III-R, IV-R)

2. The persons authorized to notify stroke team members when a suspected stroke patient is in route and/or when a suspected stroke patient has arrived at the stroke center; (I-R, II-R, III-R, IV-R)

3. The method for immediate notification and the response requirements for stroke team members when a suspected stroke patient is in route to the stroke center and/or when a suspected stroke patient has arrived at the stroke center; and (I-R/IA, II-R/IA, III-R/IA, IV-R/IA)

4. All members of the stroke call roster shall comply with the availability and response requirements per the stroke center's protocols and be in communication within fifteen (15) minutes of notification of the patient. If not on the stroke center's premises, stroke call roster members who are on call shall carry electronic communication devices at all times to permit contact by the hospital. It is recommended that one (1) member of the stroke team, per stroke center protocol, be at the patient's bedside within fifteen (15) minutes of notification of the patient. (I-R, II-R, III-R, IV-R)

(J) The stroke center shall have a fibrinolysis protocol for cases when fibrinolysis is achievable. (I-R, II-R, III-R)

(K) The stroke center shall have transfer agreements between referring and receiving facilities that address the following:

1. A one- (1-) call transfer protocol that establishes the criteria used to triage stroke patients and identifies persons authorized to notify the designated stroke center; and (I-R, II-R, III-R, IV-R)

2. A rapid transfer process in place to transport a stroke patient to a higher level of stroke care when needed. (II-R, III-R, IV-R)

(L) The stroke center shall have rehabilitation services that are directed by a physician with board certification in physical medicine and rehabilitation or by other properly trained individuals (e.g., neurologist experienced in stroke rehabilitation). (I-R, II-R)

(M) The stroke center shall have consults for physical medicine and rehabilitation, physical therapy, occupational therapy, and speech therapy requested and completed when deemed medically necessary within forty-eight (48) hours of admission. (I-R, II-R)

(N) The stroke center shall demonstrate that there is a plan for adequate post-discharge and post-transfer follow-up on stroke patients, including rehabilitation and repatriation, if indicated. (I-R, II-R, III-R, IV-R)

(O) The stroke center shall maintain a stroke patient log. The log information shall be kept for a period of five (5) years and made available to the Department of Health and Senior Services (department) during reviews for all stroke patients which contains the following:

1. Response times; (I-R, II-R, III-R, IV-R)

2. Patient diagnosis; (I-R, II-R, III-R, IV-R)

3. Treatment/actions; (I-R, II-R, III-R, IV-R)

4. Outcomes; (I-R, II-R, III-R, IV-R)

5. Number of patients; and (I-R, II-R, III-R, IV-R)

6. Benchmark indicators. (I-R, II-R, III-R, IV-R)

(P) The stroke center shall have a helicopter landing area. (I-R, II-R, III-R, IV-R)

1. Level I and II stroke centers shall have a lighted designated helicopter landing area at the stroke center to accommodate incoming medical helicopters. (I-R, II-R)

A. The landing area shall serve solely as the receiving and take-off area for medical helicopters and shall be cordoned off at all times from the general public to assure its continual availability and safe operation. (I-R, II-R)

B. The landing area shall be on the hospital premises no more

than three (3) minutes from the emergency room. (I-R, II-R)

2. Level III and IV stroke centers shall have a lighted designated helicopter landing area that meets the following requirements:

A. Accommodates incoming medical helicopters; (III-R, IV-R)

B. Serves as the receiving and take-off area for medical helicopters; (III-R, IV-R)

C. Be cordoned off when in use from the general public; (III-R, IV-R)

D. Be managed to assure its continual availability and safe operation; and (III-R, IV-R)

E. Though not required, it is recommended the landing area be no more than three (3) minutes from the emergency department. (III-R, IV-R)

(Q) Stroke centers shall enter data into the Missouri stroke registry as follows:

1. All stroke centers shall submit data into the department's Missouri stroke registry on each stroke patient who is admitted to the stroke center, transferred out of the stroke center, or dies as a result of the stroke (independent of hospital admission or hospital transfer status). The data required to be submitted into the Missouri stroke registry by the stroke centers is listed and explained in the document entitled "Time Critical Diagnosis Stroke Center Registry Data Elements" dated March 1, 2012, which is incorporated by reference in this rule and is available at the Missouri Department of Health and Senior Services, PO Box 570, Jefferson City, MO 65102-0570 or on the department's website at [www.health.mo.gov](http://www.health.mo.gov). This rule does not incorporate any subsequent amendments or additions; (I-R, II-R, III-R, IV-R)

2. The data required in paragraph (1)(Q)1. above shall be submitted electronically into the Missouri stroke registry via the department's website at [www.health.mo.gov](http://www.health.mo.gov); (I-R, II-R, III-R, IV-R)

3. The data required in paragraph (1)(Q)1. above shall be submitted electronically into the Missouri stroke registry on at least a quarterly basis for that calendar year. Stroke centers have ninety (90) days after the quarter ends to submit the data electronically into the Missouri stroke registry; (I-R, II-R, III-R, IV-R)

4. The data submitted by the stroke centers shall be complete and current; and (I-R, II-R, III-R, IV-R)

5. The data shall be managed in compliance with the confidentiality requirements and procedures contained in section 192.067, RSMo. (I-R, II-R, III-R, IV-R)

(R) A stroke center shall maintain a diversion protocol for the stroke center that is designed to allow best resource management within a given area. The stroke center shall create criteria for diversion in this diversion protocol and shall detail a performance improvement and patient safety process in the diversion protocol to review and validate the criteria for diversion created by the stroke center. The stroke center shall also collect, document, and maintain diversion information that includes at least the date, length of time, and reason for diversion. This diversion information shall be readily retrievable by the stroke center during a review by the department and shall be kept by the stroke center for a period of five (5) years. (I-R, II-R, III-R, IV-R)

(2) Medical Staffing Standards for Stroke Center Designation.

(A) The stroke center's medical staff credentialing committee shall provide a delineation of privileges for neurologists, neurosurgeons, and neuro-interventionalists, as applicable to the stroke center. (I-R, II-R)

(B) The stroke center shall credential and shall have the following types of physicians available as listed below:

1. A neurologist shall be available for consultation within fifteen (15) minutes of patient notification; (I-R)

2. A physician with experience and expertise in diagnosing and treating patients with cerebrovascular disease shall be available for consultation within fifteen (15) minutes of patient notification; (II-R)

3. A neurosurgeon as follows:

A. Neurosurgeon and back-up coverage on the call roster; (I-R/PA)

B. Neurosurgeon and back-up coverage on the call roster or available within two (2) hours by transfer agreement if not on staff; and (II-R/PA)

C. The neurosurgery staffing requirement may be fulfilled by a surgeon who has been approved by the chief of neurosurgery for care of stroke patients and shall be capable of initiating measures to stabilize the patient and perform diagnostic procedures; (I-R, II-R)

4. A neuro-interventional specialist; (I-R/PA)

5. An emergency department physician; (I-R/IH, II-R/IH, III-R/IH; IV-R/IA)

6. An internal medicine physician; (I-R/PA, II-R/PA, III-R/PA)

7. A diagnostic radiologist; and (I-R/IA, II-R/IA, III-R/IA)

8. An anesthesiologist. (I-R/PA, II-R/PA)

A. Anesthesiology staffing requirements may be fulfilled by anesthesiology residents, certified registered nurse anesthetists (CRNA), or anesthesia assistants capable of assessing emergent situations in stroke patients and of providing any indicated treatment including induction of anesthesia. When anesthesiology residents or CRNAs are used to fulfill availability requirements, the staff anesthesiologist on call will be advised and promptly available and present for all operative interventions and emergency airway conditions. The CRNA may proceed with life preserving therapy while the anesthesiologist is in route under the direction of the neurosurgeon, including induction of anesthesia. An anesthesiologist assistant shall practice only under the direct supervision of an anesthesiologist who is physically present or immediately available as this term is defined in section 334.400, RSMo. (I-R, II-R)

(3) Standards for Hospital Resources and Capabilities for Stroke Center Designation.

(A) The stroke center shall meet emergency department standards listed below. (I-R, II-R, III-R, IV-R)

1. The emergency department staffing shall meet the following requirements:

A. The emergency department in the stroke center shall provide immediate and appropriate care for the stroke patient; (I-R, II-R, III-R, IV-R)

B. A level I stroke center shall have a medical director of the emergency department who shall be board-certified or board-admissible in emergency medicine by the American Board of Medical Specialties, the Bureau of Osteopathic Specialties and Boards of Certification, or the Royal College of Physicians and Surgeons of Canada; (I-R)

C. A level II stroke center shall have a medical director of the emergency department who shall be a board-certified or board-admissible physician; (II-R)

D. A level III and IV stroke center shall have a medical director of the emergency department who is recommended to be a board-certified or board-admissible physician; (III-R, IV-R)

E. There shall be an emergency department physician credentialed for stroke care by the stroke center covering the emergency department twenty-four (24) hours a day, seven (7) days a week; (I-R/IH, II-R/IH, III-R/IH, IV-R/IA)

F. The emergency department physician who provides coverage shall be current in continuing medical education in the area of cerebrovascular disease; (I-R, II-R, III-R, IV-R)

G. There shall be a written policy defining the relationship of the emergency department physicians to other physician members of the stroke team; (I-R, II-R, III-R, IV-R)

H. Registered nurses in the emergency department shall be current in continuing education requirements as set forth in section (4) of this rule; (I-R, II-R, III-R, IV-R)

I. All registered nurses assigned to the emergency department shall be determined to be credentialed in the care of the stroke patient by the stroke center within one (1) year of assignment and remain current in continuing education requirements as set forth in section

(4) of this rule; and (I-R, II-R, III-R, IV-R)

J. The emergency department in stroke centers shall have written care protocols for identification, triage, and treatment of acute stroke patients that are available to emergency department personnel, reviewed annually, and revised as needed. (I-R, II-R, III-R, IV-R)

2. Nursing documentation for the stroke patient shall be on a stroke flow sheet approved by the stroke medical director and the stroke program coordinator/manager. (I-R, II-R, III-R, IV-R)

3. The emergency department shall have at least the following equipment for resuscitation and life support available to the unit:

A. Airway control and ventilation equipment including:

(I) Laryngoscopes; (I-R, II-R, III-R, IV-R)

(II) Endotracheal tubes; (I-R, II-R, III-R, IV-R)

(III) Bag-mask resuscitator; (I-R, II-R, III-R, IV-R)

(IV) Sources of oxygen; and (I-R, II-R, III-R, IV-R)

(V) Mechanical ventilator; (I-R, II-R, III-R)

B. Suction devices; (I-R, II-R, III-R, IV-R)

C. Electrocardiograph (ECG), cardiac monitor, and defibrillator; (I-R, II-R, III-R, IV-R)

D. Central line insertion equipment; (I-R, II-R, III-R)

E. All standard intravenous fluids and administration devices including intravenous catheters and intraosseous devices; (I-R, II-R, III-R, IV-R)

F. Drugs and supplies necessary for emergency care; (I-R, II-R, III-R, IV-R)

G. Two- (2-) way communication link with emergency medical service (EMS) vehicles; (I-R, II-R, III-R, IV-R)

H. End-tidal carbon dioxide monitor; and (I-R, II-R, III-R, IV-R)

I. Temperature control devices for patient and resuscitation fluids. (I-R, II-R, III-R IV-R)

4. The stroke center emergency department shall maintain equipment following the hospital's preventive maintenance schedule and document when this equipment is checked. (I-R, II-R, III-R, IV-R)

(B) The stroke center shall have a designated intensive care unit (ICU). (I-R, II-R)

1. The intensive care unit shall ensure staffing to provide appropriate care of the stroke patient. (I-R, II-R)

A. The stroke center intensive care unit shall have a designated intensive care unit medical director who has twenty-four (24) hours a day, seven (7) days a week access to a physician knowledgeable in stroke care and who meets the stroke call roster continuing medical education requirements as set forth in section (4) of this rule. (I-R, II-R)

B. The stroke center intensive care unit shall have a physician on duty or available twenty-four (24) hours a day, seven (7) days a week who is not the emergency department physician. This physician shall have access to a physician on the stroke call roster. (I-R/IA, II-R/IA)

C. The stroke center intensive care unit shall have a one to one (1:1) or one to two (1:2) registered nurse/patient ratio used for critically ill patients requiring intensive care unit level care. (I-R, II-R)

D. The stroke center intensive care unit shall have registered nurses in the intensive care unit who are current in continuing education requirements as set forth in section (4) of this rule. (I-R, II-R)

E. The stroke center intensive care unit shall have registered nurses in the intensive care unit who meet at least the following core credentials for care of stroke patients on a yearly basis:

(I) Care of patients after thrombolytic therapy; (I-R, II-R)

(II) Treatment of blood pressure abnormalities with parenteral vasoactive agents; (I-R, II-R)

(III) Management of intubated/ventilated patients; (I-R, II-R)

(IV) Detailed neurologic assessment and scales (e.g., National Institutes of Health Stroke Scale, Glasgow Coma Scale); (I-R, II-R)

(V) Care of patients with intracerebral hemorrhage and subarachnoid hemorrhage at all level I centers and all level II centers with neurosurgical capability; (I-R, II-R)

(VI) Function of ventriculostomy and external ventricular drainage apparatus in all level I centers and all level II centers with neurosurgical capability; and (I-R, II-R)

(VII) Treatment of increased intracranial pressure in all level I centers and all level II centers with neurosurgical capability. (I-R, II-R)

2. The stroke center intensive care unit shall have written care protocols for identification and treatment of acute stroke patients which are available to intensive care unit personnel, reviewed annually, and revised as needed. (I-R, II-R)

3. The stroke center intensive care unit shall have intensive care unit beds for stroke patients or, if space is not available in the intensive care unit, the stroke center shall make arrangements to provide the comparable level of care until space is available in the intensive care unit. (I-R, II-R)

4. The stroke center intensive care unit shall have equipment available for resuscitation and to provide life support for the stroke patient. This equipment shall include at least the following:

A. Airway control and ventilation equipment including laryngoscopes, endotracheal tubes, bag-mask resuscitator, and a mechanical ventilator; (I-R, II-R)

B. Oxygen source with concentration controls; (I-R, II-R)

C. Cardiac emergency cart, including medications; (I-R, II-R)

D. Telemetry, ECG capability, cardiac monitor, and defibrillator; (I-R, II-R)

E. Electronic pressure monitoring and pulse oximetry; (I-R, II-R)

F. End-tidal carbon dioxide monitor; (I-R, II-R)

G. Patient weighing devices; (I-R, II-R)

H. Drugs, intravenous fluids, and supplies; and (I-R, II-R)

I. Intracranial pressure monitoring devices. (I-R, II-R)

5. The intensive care unit shall check all equipment according to the hospital preventive maintenance schedule and the stroke center shall document when it is checked. (I-R, II-R)

(C) Level I and level II stroke centers shall provide a stroke unit. A level III stroke center that has an established plan for admitting and caring for stroke patients under a supervised relationship with a level I or II stroke center pursuant to subparagraph (1)(C)3.H. above shall also provide a stroke unit. (I-R, II-R, III-R)

1. The stroke center shall have a designated medical director for the stroke unit who has access to a physician knowledgeable in stroke care and who meets the stroke call roster continuing medical education requirements as set forth in section (4) of this rule. (I-R, II-R, III-R)

2. The stroke center stroke unit shall have a physician on duty or available twenty-four (24) hours a day, seven (7) days a week who is not the emergency department physician. This physician shall have access to a physician on the stroke call roster. (I-R/IA, II-R/IA, III-R/IA)

3. The stroke center stroke unit shall have registered nurses and other essential personnel on duty twenty-four (24) hours a day, seven (7) days a week. (I-R, II-R, III-R)

4. The stroke center stroke unit shall have registered nurses who are current in continuing education requirements as set forth in section (4) of this rule. (I-R, II-R, III-R)

5. The stroke center stroke unit shall annually credential registered nurses that work in the stroke unit. (I-R, II-R, III-R)

6. The stroke center stroke unit shall have written care protocols for identification and treatment of acute stroke patients (e.g., lytic and post-lytic management, hemorrhagic conversion according to current best evidence) which are available to stroke unit personnel, reviewed annually, and revised as needed. (I-R, II-R, III-R)

7. The stroke center stroke unit shall have equipment to support the care and resuscitation of the stroke patient that includes at least

the following:

A. Airway control and ventilation equipment including:

(I) Laryngoscopes, endotracheal tubes of all sizes; (I-R, II-R, III-R)

(II) Bag-mask resuscitator and sources of oxygen; and (I-R, II-R, III-R)

(III) Suction devices; (I-R, II-R, III-R)

B. Telemetry, electrocardiograph, cardiac monitor, and defibrillator; (I-R, II-R, III-R)

C. All standard intravenous fluids and administration devices and intravenous catheters; and (I-R, II-R, III-R)

D. Drugs and supplies necessary for emergency care. (I-R, II-R, III-R)

8. The stroke center stroke unit shall maintain equipment following the hospital preventive maintenance schedule and document when it is checked. (I-R, II-R, III-R)

(D) The stroke center shall provide radiological and diagnostic capabilities. (I-R, II-R, III-R)

1. The radiological and diagnostic capabilities shall include a documented mechanism for prioritization of stroke patients and timely interpretation to aid in patient management. (I-R, II-R, III-R)

2. The radiological and diagnostic capabilities shall include the following equipment and staffing capabilities:

A. Angiography with interventional capability available twenty-four (24) hours a day, seven (7) days a week; (I-R/PA)

B. Cerebroangiography technologist on call and available within thirty (30) minutes for emergent procedures, and on call and available within sixty (60) minutes for routine procedures, and available twenty-four (24) hours a day, seven (7) days a week; (I-R)

C. In-house computerized tomography; (I-R/IA, II-R/IA, III-R/IA)

D. Computerized tomography perfusion; (I-R/IA)

E. Computerized tomography angiography; (I-R/IA)

F. Computerized tomography technologist; (I-R/IH, II-R/IH, III-R/IA)

G. Magnetic resonance imaging; (I-R, II-R)

H. Magnetic resonance angiogram/magnetic resonance venography; (I-R, II-R)

I. Magnetic resonance imaging technologist on call and available within sixty (60) minutes, twenty-four (24) hours a day, seven (7) days a week; (I-R, II-R)

J. Extracranial ultrasound; (I-R, II-R)

K. Equipment and clinical staff to evaluate for vasospasm available within thirty (30) minutes for emergent evaluation, and available within sixty (60) minutes for routine evaluation, and available twenty-four (24) hours a day, seven (7) days a week; (I-R)

L. Transthoracic echo; (I-R, II-R)

M. Transesophageal echo; and (I-R, II-R)

N. Resuscitation equipment available to the radiology department. (I-R, II-R, III-R)

3. The radiological and diagnostic capabilities shall include adequate physician and nursing personnel available with monitoring equipment to fully support the acute stroke patient and provide documentation of care during the time the patient is physically present in the radiology department and during transportation to and from the radiology department. (I-R, II-R, III-R)

4. The radiological and diagnostic capabilities shall include the stroke center maintaining all radiology and diagnostic equipment according to the hospital preventive maintenance schedule and documenting when it is checked. (I-R, II-R, III-R)

(E) All level I stroke centers shall have operating room personnel, equipment, and procedures. Those level II stroke centers with neurosurgical capability shall also meet operating room personnel, equipment, and procedure requirements. (I-R, II-R)

1. Operating room staff shall be available twenty-four (24) hours a day, seven (7) days a week. (I-R/PA, II-R/PA)

2. Registered nurses shall annually maintain core competencies as required by the stroke center.

3. Operating rooms shall have at least the following equipment:
  - A. Operating microscope; (I-R, II-R)
  - B. Thermal control equipment for patient and resuscitation fluids; (I-R, II-R)
  - C. X-ray capability; (I-R, II-R)
  - D. Instruments necessary to perform an open craniotomy; (I-R, II-R)
  - E. Monitoring equipment; and (I-R, II-R)
  - F. Resuscitation equipment available to the operating room. (I-R, II-R)
4. The operating room shall maintain all equipment according to the hospital preventive maintenance schedule and document when it is checked. (I-R, II-R)
- (F) All level I stroke centers shall meet post-anesthesia recovery room (PAR) requirements listed below. Those level II stroke centers with neurosurgical capability shall also have a post-anesthesia recovery room and meet the requirements below—
  1. The stroke center post-anesthesia recovery room shall have registered nurses and other essential personnel on call and available within sixty (60) minutes twenty-four (24) hours a day, seven (7) days a week; (I-R, II-R)
  2. The stroke center post-anesthesia recovery room's registered nurses shall annually maintain core competencies as required by the stroke center; (I-R, II-R)
  3. The stroke center post-anesthesia recovery room shall have at least the following equipment for resuscitation and to provide life support for the stroke patient:
    - A. Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes, bag-mask resuscitator, sources of oxygen, and mechanical ventilator; (I-R, II-R)
    - B. Suction devices; (I-R, II-R)
    - C. Telemetry, ECG capability, cardiac monitor, and defibrillator; (I-R, II-R)
    - D. All standard intravenous fluids and administration devices, including intravenous catheters; and (I-R, II-R)
    - E. Drugs and supplies necessary for emergency care; and (I-R, II-R)
  4. The stroke center post-anesthesia recovery room shall maintain all equipment according to the hospital preventive maintenance schedule and document when it is checked. (I-R, II-R)
- (G) The stroke center shall have clinical laboratory services available twenty-four (24) hours a day, seven (7) days a week that meet the following requirements:
  1. Written protocol to provide timely availability of results; (I-R, II-R, III-R, IV-R)
  2. Standard analyses of blood, urine, and other body fluids; (I-R, II-R, III-R, IV-R)
  3. Blood typing and cross-matching; (I-R, II-R, III-R)
  4. Coagulation studies; (I-R, II-R, III-R, IV-R)
  5. Comprehensive blood bank or access to a community central blood bank and adequate hospital blood storage facilities; (I-R, II-R, III-R)
  6. Blood bank or access to a community central blood bank and adequate hospital blood storage facilities; (IV-R)
  7. Blood gases and pH determinations; (I-R, II-R, III-R, IV-R)
  8. Blood chemistries; and (I-R, II-R, III-R, IV-R)
  9. Written protocol for prioritization of the stroke patient with other time critical patients. (I-R, II-R, III-R, IV-R)
- (H) The stroke center shall have support services to assist the patient's family from the time of entry into the facility to the time of discharge and records to document that these services were provided. (I-R, II-R, III-R, IV-R)
- (I) The stroke center shall have a stroke rehabilitation program or a plan to refer those stroke patients that require rehabilitation to another facility or community agency that can provide necessary services. (I-R, II-R, III-R)
- (4) Continuing Medical Education (CME) and Continuing Education

#### Standards for Stroke Center Designation.

(A) The stroke center shall ensure that staff providing services to stroke patients receives required continuing medical education and continuing education and document this continuing medical education and continuing education for each staff member. The department shall allow up to one (1) year from the date of the hospital's initial stroke center designation for stroke center staff members to complete all of the required continuing medical education and continuing education if the stroke center staff complete and document that at least half of the required continuing medical education and/or continuing education hours have been completed for each stroke center staff member at the time of on-site initial application review. The stroke center shall submit documentation to the department within one (1) year of the initial designation date that all continuing medical education and continuing education requirements for stroke center staff members have been met in order to maintain the stroke center's designation. (I-R, II-R, III-R, IV-R)

(B) The stroke call roster members shall complete the following continuing education requirements:

1. Level I core team members of the stroke call roster shall complete a minimum of ten (10) hours of continuing education in cerebrovascular disease every year, and it is recommended that a portion of those hours shall be on stroke care. All other members of the stroke call roster in level I stroke centers shall complete a minimum average of ten (10) hours of continuing education in cerebrovascular disease every year. This continuing education shall be reviewed for appropriateness to the practitioner's level of responsibility by the stroke medical director; (I-R)

2. Level II core team members of the stroke call roster shall complete a minimum of eight (8) hours of continuing education in cerebrovascular disease every year, and it is recommended that a portion of those hours be in stroke care. All other members of the stroke call roster in level II stroke centers shall complete a minimum average of eight (8) hours of continuing education in cerebrovascular disease every year. This continuing education shall be reviewed for appropriateness to the practitioner's level of responsibility by the stroke medical director; and (II-R)

3. Level III and IV stroke call roster members shall complete a minimum average of eight (8) hours of continuing education in cerebrovascular disease every two (2) years. This continuing education shall be reviewed for appropriateness to the practitioner's level of responsibility by the stroke medical director. (III-R, IV-R)

(C) The stroke medical director shall complete the following continuing medical education requirements:

1. Level I stroke medical directors shall complete a minimum of twelve (12) hours of continuing medical education every year in the area of cerebrovascular disease; (I-R)

2. Level II stroke medical directors shall complete a minimum of eight (8) hours of continuing medical education every year in the area of cerebrovascular disease; and (II-R)

3. Level III and IV stroke medical directors shall complete a minimum of eight (8) hours of continuing medical education every two (2) years in the area of cerebrovascular disease. (III-R, IV-R)

(D) The stroke center's stroke program manager/coordinator shall complete the following continuing education requirements:

1. Level I program managers/coordinators shall:

- A. Complete a minimum of ten (10) hours of continuing education every year in cerebrovascular disease. This continuing education shall be reviewed by the stroke medical director for appropriateness to the stroke program manager/coordinator's level of responsibility; and (I-R)

- B. Attend one (1) national, regional, or state meeting every two (2) years focused on the area of cerebrovascular disease. If the national or regional meeting provides continuing education, then that continuing education may count toward the annual requirement; (I-R)

2. Level II program managers/coordinators shall—

- A. Complete a minimum average of eight (8) hours of continuing education every year in cerebrovascular disease. This continuing education shall be reviewed for appropriateness by the stroke



medical director to the stroke program manager/coordinator's level of responsibility; and (II-R)

B. Attend one (1) national, regional, or state meeting every three (3) years focused on the area of cerebrovascular disease. If the national, regional, or state meeting provides continuing education, then that continuing education may count toward the annual requirement; and (II-R)

3. Level III and IV center program managers/coordinators shall complete a minimum average of eight (8) hours of continuing education in cerebrovascular disease every two (2) years. This continuing education shall be reviewed by the stroke medical director for appropriateness to the stroke program manager/coordinator's level of responsibility. (III-R, IV-R)

(E) Emergency department personnel in stroke centers shall complete the following continuing education requirements:

1. Emergency department physicians in stroke centers shall complete—

A. Level I and II emergency department physicians providing stroke coverage shall complete a minimum average of four (4) hours of continuing medical education in cerebrovascular disease every year; or (I-R, II-R)

B. Level III and IV emergency department physicians providing stroke coverage shall complete a minimum average of six (6) hours of continuing medical education in cerebrovascular disease every two (2) years; and (III-R, IV-R)

2. Registered nurses assigned to the emergency departments in stroke centers shall complete—

A. Level I and II registered nurses shall complete a minimum of four (4) hours of cerebrovascular disease continuing education every year; (I-R, II-R)

B. Level III and IV registered nurses shall complete a minimum of six (6) hours of cerebrovascular disease continuing education every two (2) years; and (III-R, IV-R)

C. Registered nurses shall maintain core competencies in the care of the stroke patient annually as determined by the stroke center. Training to maintain these competencies may count toward continuing education requirements. (I-R, II-R, III-R, IV-R)

(F) Registered nurses assigned to the intensive care unit in the stroke centers who care for stroke patients shall complete the following continuing education requirements:

1. Level I intensive care unit registered nurses shall complete a minimum of ten (10) hours of cerebrovascular related continuing education every year; (I-R)

2. Level II intensive care unit registered nurses shall complete a minimum of eight (8) hours of cerebrovascular related continuing education every year; and (II-R)

3. The stroke medical director shall review the continuing education for appropriateness to the practitioner's level of responsibility. (I-R, II-R)

(G) Stroke unit registered nurses in the stroke centers shall complete the following continuing education requirements:

1. All level I stroke unit registered nurses shall complete a minimum of ten (10) hours of cerebrovascular disease continuing education every year; (I-R)

2. All level II stroke unit registered nurses shall complete a minimum of eight (8) hours of cerebrovascular disease continuing education every year; (II-R)

3. All level III stroke centers caring for stroke patients under an established plan for admitting and caring for stroke patients under a supervised relationship with a physician affiliated with a level I or II stroke center shall require registered nurses in the stroke unit complete a minimum of eight (8) hours of cerebrovascular disease continuing education every two (2) years; and (III-R)

4. The stroke medical director shall review the continuing education for appropriateness to the practitioner's level of responsibility. (I-R, II-R, III-R)

(5) Standards for Hospital Performance Improvement and Patient

Safety, Outreach, Public Education, and Training Programs for Stroke Center Designation.

(A) The stroke center shall maintain an ongoing performance improvement and patient safety program designed to objectively and systematically monitor, review, and evaluate the quality, timeliness, and appropriateness of patient care; resolve problems; and improve patient care. (I-R, II-R, III-R, IV-R)

1. The stroke center shall collect, document, trend, maintain for at least five (5) years, and make available for review by the department at least the following data elements:

A. Door-to-needle time; (I-R, II-R, III-R)

B. Number of patients presenting within the treatment window; and (I-R, II-R, III-R)

C. Number of eligible patients treated with thrombolytics. (I-R, II-R, III-R)

2. The stroke center shall at least quarterly conduct a regular morbidity and mortality review meeting which shall be documented in the meeting minutes and/or the meeting attendance documents. (I-R, II-R, III-R, IV-R)

3. The stroke center shall review the reports generated by the department from the Missouri stroke registry. (I-R, II-R, III-R, IV-R)

4. The stroke center shall conduct monthly reviews of pre-hospital stroke care including inter-facility transfers. (I-R, II-R, III-R, IV-R)

5. The stroke center shall participate in the emergency medical services regional system of stroke care in its respective emergency medical services region as defined in 19 CSR 30-40.302. (I-R, II-R, III-R, IV-R)

6. The stroke center shall document review of its cases of stroke patients who received U.S. Food and Drug Administration-approved thrombolytics and who remained at the referring hospital greater than ninety (90) minutes prior to transfer. (I-R, II-R, III-R)

7. The stroke center shall document its review of cases of stroke patients who did not receive U.S. Food and Drug Administration-approved thrombolytics and who remained greater than sixty (60) minutes at the referring hospital prior to transfer. (II-R, III-R, IV-R)

8. The stroke center shall review and monitor the core competencies of the physicians, practitioners, and nurses and document these core competencies have been met. (I-R, II-R, III-R, IV-R)

(B) The stroke center shall establish a patient and public education program to promote stroke prevention and stroke symptoms awareness. (I-R, II-R, III-R, IV-R)

(C) It is recommended that level I, II, and III stroke centers establish a professional education outreach program in catchment areas to provide training and other supports to improve care of stroke patients. (I-R, II-R, III-R)

(D) Each stroke center shall establish a training program for professionals on caring for stroke patients in the stroke center that includes at least the following:

1. A procedure for training nurses and clinical staff to be credentialed in stroke care; (I-R, II-R, III-R, IV-R)

2. A mechanism to assure that all nurses providing care to stroke patients complete a minimum of required continuing education as set forth in section (4) of this rule to become credentialed in stroke care; and (I-R, II-R, III-R, IV-R)

3. The content and format of any stroke continuing education courses developed and offered by the stroke center shall be developed with the oversight of the stroke medical director. (I-R, II-R, III-R, IV-R)

(E) The stroke center shall provide and monitor timely feedback to the emergency medical service providers and referring hospital, if involved. This feedback shall include, at least, diagnosis, treatment, and disposition of the patients. It is recommended that the feedback be provided within seventy-two (72) hours of admission to the hospital. When emergency medical services does not provide patient care data on patient arrival or in a timely fashion (recommended

within three (3) hours of patient delivery), this time frame shall not apply. (I-R, II-R, III-R, IV-R)

(F) Stroke centers shall be actively involved in local and regional emergency medical services systems by providing training and clinical educational resources. (I-R, II-R, III-R, IV-R)

(6) Standards for the Programs in Stroke Research for Stroke Center Designation.

(A) Level I stroke centers shall support an ongoing stroke research program as evidenced by any of the following:

1. Production of evidence-based reviews of the stroke program's process and clinical outcomes; (I-R)

2. Publications in peer-reviewed journals; (I-R)

3. Reports of findings presented at regional, state, or national meetings; (I-R)

4. Receipt of grants for study of stroke care; (I-R)

5. Participation in multi-center studies; and (I-R)

6. Epidemiological studies and individual case studies. (I-R)

(B) The stroke center shall agree to cooperate and participate with the department in developing stroke prevention programs. (I-R, II-R, III-R, IV-R)

*AUTHORITY: section 192.006, RSMo 2000, and sections 190.185 and 190.241, RSMo Supp. 2012. Original rule filed Nov. 15, 2012.*

*PUBLIC COST: This proposed rule will cost state agencies or political subdivisions \$177,449,044 for the initial four- (4-) year period and \$50,413,398 annually thereafter.*

*PRIVATE COST: This proposed rule will cost private entities \$354,807,289 for the initial four- (4-) year period and \$92,504,758 annually thereafter.*

*NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed rule with Teresa Generous, Director, Division of Regulation and Licensure, Missouri Department of Health and Senior Services, PO Box 570, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the **Missouri Register**. No public hearing is scheduled.*

**FISCAL NOTE  
PUBLIC COST**

- I. Department Title: Missouri Department of Health and Senior Services  
Division Title: Division of Regulation and Licensure  
Chapter Title: Chapter 40-Comprehensive Emergency Medical Services System**

<b>Rule Number and Name:</b>	<b>19 CSR 30-40.730 Standards for Stroke Center Designation.</b>
<b>Type of Rulemaking:</b>	<b>Proposed</b>

**II. SUMMARY OF FISCAL IMPACT**

Affected Agency or Political Subdivision	Estimated Cost of Compliance in the Aggregate
<b>18 public hospitals</b>	
<b>1 Level I Stroke Center</b>	<b>\$56,620,276 for the first 4 year period and \$13,455,172 for annually thereafter</b>
<b>1 Level II Stroke Center</b>	<b>\$52,452,071 for the first 4 year period and \$12,026,107 for annually thereafter</b>
<b>Level III Stroke Centers</b>	<b>\$51,074,700 for the first 4 year period and \$18,510,821 for annually thereafter</b>
<b>Level IV Stroke Centers</b>	<b>\$17,256,597 for the first 4 year period and \$6,414,498 for annually thereafter</b>
<b>Department of Health and Senior Services Costs</b>	<b>\$45,400 for the first 4 year period and \$6,800 for annually thereafter</b>
<b>Total</b>	<b>\$177,449,044 for the first 4 year period and \$50,413,398 for annually thereafter</b>

**III. WORKSHEET**

It is anticipated that most if not all of the stroke centers voluntarily applying to be designated as stroke centers will have the staff and equipment required to be the level of stroke center for which they are applying to be designated. However, the list of required staff and equipment has been detailed below, even if it is assumed the hospital currently meets these requirements.

**1. Level I stroke center.**

**A. Salary Costs for Medical Professionals.**

- 1) A physician experienced in diagnosing and treating cerebrovascular disease - \$204,430 annually X one level I stroke center = \$204,430 X 4 years = \$817,720 for the first 4 year period and \$204,430 annually X one level I stroke center X 1 year = \$204,430 annually thereafter.**

- 2) At least one other health care professional or qualified individual credentialed in stroke patient care - \$126,046 annually X one level I stroke center = \$126,046 X 4 years = \$504,184 for the first 4 year period and \$126,046 annually X one level I stroke center X 1 year = \$126,046 annually thereafter.
- 3) Neuro-interventional specialist/neurointerventionalist - \$195,000 annually X one level I stroke center for the first 4 year period = \$195,000 X 4 years = \$780,000 for the first 4 year period and \$195,000 X one level I stroke center X 1 year = \$195,000 annually thereafter.
- 4) Other clinical staff as deemed necessary in the neurointerventional laboratory - \$59,750 annually X one level I stroke center = \$59,750 X 4 years = \$239,000 for the first 4 year period and \$59,750 annually X one level I stroke center X 1 year = \$59,750 annually thereafter.
- 5) Stroke center medical director who is recommended to be a board certified or board admissible neurologist or other neuro-speciality trained physician - \$204,430 annually X one level I stroke center = \$204,430 X 4 years = \$817,720 for the first 4 year period and \$204,430 annually X one level I stroke center X 1 year = \$204,430 annually thereafter.
- 6) Stroke program manager/coordinator who is a registered nurse or a qualified individual - \$126,046 annually X one level I stroke center = \$126,046 X 4 years = \$504,184 for the first 4 year period and \$126,046 annually X one level I stroke center X 1 year = \$126,046 annually thereafter.
- 7) Physician with board certification in physical medicine and rehabilitation or by other properly trained individuals (e.g. neurologist experienced in stroke rehabilitation) to direct the stroke center's rehabilitation services - \$200,339 annually X one level I stroke center = \$200,339 X 4 years = \$801,356 for the first 4 year period and \$200,339 annually X one level I stroke center X 1 year = \$200,339 annually thereafter.
- 8) Neurologist - \$204,430 annually X one level I stroke center = \$204,430 X 4 years = \$817,720 for the first 4 year period and \$204,430 X one level I stroke center X 1 year = \$204,430 annually thereafter.
- 9) Neurosurgeon or surgeon approved by the chief of neurosurgery for care of stroke patients - \$468,766 annually X one level I stroke center = \$468,766 X 4 years = \$1,875,064 for the first 4 year period and \$468,766 annually X one level I stroke center X 1 year = \$468,766 annually thereafter.
- 10) An internal medicine physician - \$181,823 annually X one level I stroke center = \$181,823 X 4 years = \$727,292 for the first 4 year period and \$181,823 annually X one level I stroke center X 1 year = \$181,823 annually thereafter.
- 11) A diagnostic radiologist - \$402,539 annually X one level I stroke center = \$402,539 X 4 years = \$1,610,156 for the first 4 year period and \$402,539 annually X one level I stroke center X 1 year = \$402,539 annually thereafter.
- 12) An anesthesiologist - \$331,932 annually X one level I stroke center for the first 4 year period = \$331,932 X 4 years = \$1,327,728 for the first

- four year period and \$331,932 annually X one level I stroke center X 1 year = \$331,932 annually thereafter.
- 13) Anesthesiology resident - \$61,000 annually X one level I stroke center = \$61,000 X 4 years = \$244,000 for the first 4 year period and \$61,000 annually X one level I stroke center X 1 year = \$61,000 annually thereafter.
- 14) Certified nurse anesthetists - \$155,095 annually X one level I stroke center = \$155,095 X 4 years = \$620,380 for the first year 4 year period and \$155,095 annually X one level I stroke center X 1 year = \$155,095 annually thereafter.
- 15) Anesthesia assistants - \$120,000 annually X one level I stroke center = \$120,000 X 4 years = \$480,000 for the first 4 year period and \$120,000 X one level I stroke center X 1 year = \$120,000 annually thereafter.
- 16) Emergency department physician credentialed for stroke care by the stroke center on staff 24 hours a day, 7 days a week - \$244,973 annually X 3 emergency department physicians X one level I stroke center = \$734,919 X 4 years = \$2,939,676 for the first year 4 year period and \$244,973 annually X 3 physicians X one level I stroke center X 1 year = \$734,919 annually thereafter.
- 17) Registered nurses in the emergency department - \$64,533 annually X 5 registered nurses in the emergency department X one level I stroke center = \$322,665 X 4 years = \$1,290,660 for the first 4 year period and \$322,665 X one level I stroke center X 1 year = \$322,665 annually thereafter.
- 18) Medical director of the emergency department - \$199,038 annually X one level I stroke center = \$199,038 X 4 years = \$796,152 for the first 4 year period and \$199,038 X one level I stroke center X 1 year = \$199,038 annually thereafter.
- 19) An intensive care unit medical director for stroke center intensive care unit - \$177,560 annually X one level I stroke center = \$177,560 X 4 years = \$710,240 for the first 4 year period and \$177,560 annually X one level I stroke center X 1 year = \$177,560 annually thereafter.
- 20) The stroke center intensive care unit shall have a physician on duty or available 24 hours a day 7 days a week - \$244,553 annually X 3 stroke center intensive care unit physicians X one level I stroke center = \$733,659 X 4 years = \$2,934,636 for the first 4 year period and \$244,553 annually X 3 stroke center intensive care unit physicians = \$733,659 annually X one level I stroke center X 1 year = \$733,659 annually thereafter.
- 21) The stroke center intensive care unit shall have a 1 to 1 or 1 to 2 registered nurse/patient ratio used for critically ill patients requiring intensive care unit level of care - \$67,623 annually X 5 registered nurses in the stroke center intensive care unit X one level I stroke center = \$338,115 X 4 years = \$1,352,460 for the first 4 year period and \$67,623 X 5 registered nurses = \$338,115 annually X one level I stroke center X 1 year = \$338,115 annually thereafter.
- 22) Stroke unit medical director - \$177,560 annually X one level I stroke center = \$177,560 X 4 years = \$710,240 for the first 4 year period and \$177,560 annually X one level I stroke center X 1 year = \$177,560 annually thereafter.

- 23) Physician on duty or available 24 hours a day, seven days a week in the stroke center stroke unit - \$177,560 annually X 3 physicians in the stroke center stroke unit X one level I stroke center = \$532,680 X 4 years = \$2,130,720 for the first 4 year period and \$177,560 annually X 3 physicians = \$532,680 annually X one level I stroke center X 1 year = \$532,680 annually thereafter.
- 24) Stroke center stroke unit shall have registered nurses and other essential personnel on duty 24 hours a day 7 days a week - \$65,097 annually for the registered nurse X 4 registered nurses in the stroke center stroke unit X one level I stroke center = \$260,388 X 4 years = \$1,041,552 for the first 4 year period and \$65,097 X 4 registered nurses = \$260,388 annually X one level I stroke center X 1 year = \$260,388 annually thereafter.
- 25) Certified Nursing Technician - \$30,000 annually X one level I stroke center = \$30,000 X 4 years = \$120,000 for the first 4 year period and \$30,000 annually X one level I stroke center X 1 year = \$30,000 annually thereafter.
- 26) Magnetic resonance imaging technologist on call and available within 60 minutes, 24 hours a day, 7 days a week - \$59,750 annually X 4 magnetic resonance imaging technologists X one level I stroke center = \$239,000 X 4 years = \$956,000 for the first 4 year period and \$59,750 annually X 4 magnetic resonance imaging technologists = \$239,000 annually X one level I stroke center X 1 year = \$239,000 annually thereafter.
- 27) The stroke center post-anesthesia recovery room shall have registered nurses and other essential personnel on call and available within 60 minutes 24 hours a day 7 days a week - \$65,097 annually X 4 registered nurses X one level I stroke center = \$260,388 X 4 years = \$1,041,552 for the first 4 year period and \$65,097 X 4 registered nurses = \$260,388 annually X one level I stroke center X 1 year = \$260,388 annually thereafter.
- 28) Cerebroangiography technologist on call and available within 30 minutes for emergent procedure, on call and available within 60 minutes for routine procedures and available 24 hours a day, seven days a week - \$59,750 annually X 4 cerebroangiography technologists X one level I stroke center = \$239,000 X 4 years = \$956,000 for the first 4 year period and \$59,750 X 4 cerebroangiography technologists = \$239,000 annually X one level I stroke center X 1 year = \$239,000 annually thereafter.
- 29) Computerized tomography technologist - \$58,895 annually X 4 computerized tomography technologists X one level I stroke center = \$235,580 X 4 years = \$942,320 for the first 4 year period and \$58,895 X 4 computerized tomography technologists = \$235,580 X one level I stroke center X 1 year = \$235,580 annually thereafter.
- 30) Neurologist/radiologist - average \$300,000 annually X 3 neurologist/radiologists X one level I stroke center = \$900,000 X 4 years = \$3,600,000 for the first 4 year period and \$300,000 X 3 neurologists/radiologists = \$900,000 annually X one level I stroke center X 1 year = \$900,000 annually thereafter.

- 31) Floor nurse/radiology technician - average \$62,000 annually X one level I stroke center = \$62,000 X 4 years = \$248,000 for the first 4 year period and \$62,000 annually X one level I stroke center X 1 year = \$62,000 annually thereafter.
- 32) Scrub nurse - \$68,655 annually X 4 scrub nurses X one level I stroke center = \$274,620 X 4 years = \$1,098,480 for the first 4 year period and \$68,655 X 4 scrub nurses = \$274,620 annually X one level I stroke center X 1 year = \$274,620 annually thereafter.
- 33) Nurse educator/supervisor to ensure staff are trained on core competencies - \$78,500 annually X one level I stroke center = \$78,500 X 4 years = \$314,000 for the first 4 year period and \$78,500 annually X one level I stroke center X 1 year = \$78,500 annually thereafter.

Total salary cost for medical professionals for one level I stroke center for the first year 4 year period - \$817,720 (#1 above) + \$504,184 (#2 above) + \$780,000 (#3 above) + \$239,000 (#4 above) + \$817,720 (#5 above) + \$504,184 (#6 above) + \$801,356 (#7 above) + \$817,720 (#8 above) + \$1,875,064 (#9 above) + \$727,292 (#10 above) + \$1,610,156 (#11 above) + \$1,327,728 (#12 above) + \$244,000 (#13 above) + \$620,380 (#14 above) + \$480,000 (#15 above) + \$2,939,676 (#16 above) + \$1,290,660 (#17 above) + \$796,152 (#18 above) + \$710,240 (#19 above) + \$2,934,636 (#20 above) + \$1,352,460 (#21 above) + \$710,240 (#22 above) + \$2,130,720 (#23 above) + \$1,041,552 (#24 above) + \$120,000 (#25 above) + \$956,000 (#26 above) + \$1,041,552 (#27 above) + \$956,000 (#28 above) + \$942,320 (#29 above) + \$3,600,000 (#30 above) + \$248,000 (#31 above) + \$1,098,480 (#32 above) + \$314,000 (#33 above) = \$35,349,192 for the first 4 year period.

Total salary cost for medical professionals for one level I stroke center for annually thereafter - \$204,430 (#1 above) + \$126,046 (#2 above) + \$195,000 (#3 above) + \$59,750 (#4 above) + \$204,430 (#5 above) + \$126,046 (#6 above) + \$200,339 (#7 above) + \$204,430 (#8 above) + \$468,766 (#9 above) + \$181,823 (#10 above) + \$402,539 (#11 above) + \$331,932 (#12 above) + \$61,000 (#13 above) + \$155,095 (#14 above) + \$120,000 (#15 above) + \$734,919 (#16 above) + \$322,665 (#17 above) + \$199,038 (#18 above) + \$177,560 (#19 above) + \$733,659 (#20 above) + \$338,115 (#21 above) + \$177,560 (#22 above) + \$532,680 (#23 above) + \$260,388 (#24 above) + \$30,000 (#25 above) + \$239,000 (#26 above) + \$260,388 (#27 above) + \$239,000 (#28 above) + \$235,580 (#29 above) + \$900,000 (#30 above) + \$62,000 (#31 above) + \$274,620 (#32 above) + \$78,500 (#33 above) = \$8,837,298 for annually thereafter.

**B. Continuing education costs for level I stroke center staff.**

- 1) Level I core team members of the stroke call roster shall complete a minimum of 10 hours of continuing education in cerebrovascular disease every year – average of \$10.00 per hour for online training X 10 hours = \$100 X one level I stroke center = \$100 X 4 years = \$400

- for the first 4 year period and \$100 X one level I stroke center X 1 year = \$100 annually thereafter.
- 2) Level I core team member of the stroke call roster shall complete a minimum of 10 hours of continuing education in cerebrovascular disease every year – average of \$39.99 annually for online training- \$39.99 x one level I stroke center = \$39.99 X 4 years = \$159.96 for the first 4 year period and \$39.99 X one level I stroke center X 1 year = \$39.99 annually thereafter.
  - 3) Level I stroke call roster member (emergency department physician) shall complete a minimum average of 10 hours of continuing education in cerebrovascular disease every year - average of \$10.00 per hour for online training X 10 hours X one level I stroke center = \$100 X 4 years = \$400 for the first 4 year period and \$100 X one level I stroke center X 1 year = \$100 annually thereafter.
  - 4) Level I stroke call roster member (neurointerventionalist) shall complete a minimum average of 10 hours of continuing education in cerebrovascular disease every year - average of \$10.00 per hour for online training X 10 hours X one level I stroke center = \$100 X 4 years = \$400 for the first 4 year period and \$100 X one level I stroke center X 1 year = \$100 annually thereafter.
  - 5) Level I stroke call roster member (a neurologist) shall complete a minimum average of 10 hours of continuing education in cerebrovascular disease every year - average of \$10.00 per hour for online training X 10 hours X one level I stroke center for the first 4 year period = \$100 X 4 years = \$400 for the first 4 year period and \$100 X one level I stroke center X 1 year = \$100 annually thereafter.
  - 6) Level I stroke call roster member (others as appropriate) shall complete a minimum average of 10 hours of continuing education in cerebrovascular disease every year - average of \$10.00 per hour for online training X 10 hours X one level I stroke center = \$100 annually X 3 others as appropriate = \$300 X 4 years = \$1,200 for the first 4 year period and \$300 X one level I stroke center X 1 year = \$300 annually thereafter.
  - 7) A level I stroke center medical director shall complete a minimum of 12 hours of continuing medical education every year in the area of cerebrovascular disease - average of \$10.00 per hour for online training X 12 hours X one level I stroke center = \$120 X 4 years = \$480 for the first 4 year period and \$120 X one level I stroke center X 1 year = \$120 annually thereafter.
  - 8) A level I program manager/coordinator shall complete a minimum of 10 hours of continuing education every year in cerebrovascular disease - average of \$39.99 annually for online training = \$39.99 X one level I stroke center = \$39.99 X 4 years = \$159.96 for the first 4 year period and \$39.99 X one level I stroke center X 1 year = \$39.99 annually thereafter.
  - 9) Emergency department physicians in level I stroke centers shall complete a minimum average of 4 hours of continuing medical education in cerebrovascular disease every year - average of \$10.00 per hour for online training X 3 physicians in the emergency room X 4 hours X one level I stroke center = \$120 X 4 years = \$480 for the



first 4 year period and \$10.00 X 3 physicians X 4 hours X one level I stroke center X 1 year = \$120 annually thereafter.

- 10) Registered nurses assigned to the emergency departments in level I stroke centers shall complete a minimum of 4 hours of continuing education in the area of cerebrovascular disease every year - average of \$39.99 annually for online training = \$39.99 X 5 registered nurses in the emergency room X one level I stroke center X 4 years = \$799.80 for the first 4 year period and \$39.99 X 5 registered nurses in the emergency room X one level I stroke center X 1 year = \$199.95 annually thereafter.
- 11) Registered nurses assigned to the intensive care unit in level I stroke centers who care for stroke patients shall complete a minimum of 10 hours of continuing education in the area of cerebrovascular disease every year - average of \$39.99 annually for online training X 5 registered nurses in the intensive care unit X one level I stroke center X 4 years = \$799.80 for the first 4 year period and \$39.99 annually X 5 registered nurses in the intensive care unit X one level I stroke center X 1 year = \$199.95 annually thereafter.
- 12) Stroke unit registered nurses in level I stroke centers shall complete a minimum of 10 hours of continuing education in the area of cerebrovascular disease every year - average of \$39.99 annually X 4 stroke unit registered nurses X one level I stroke center X 4 years = \$639.84 for the first 4 year period and \$39.99 X 4 registered nurses X one level I stroke center X 1 year = \$159.96 annually thereafter.

Total cost for continuing education for medical staff of one level I stroke center for the first year 4 year period - \$400 (#1 above) + \$159.96 (#2 above) + \$400 (#3 above) + \$400 (#4 above) + \$400 (#5 above) + \$1,200 (#6 above) + \$480 (#7 above) + \$159.96 (#8 above) + \$480 (#9 above) + \$799.80 (#10 above) + \$799.80 (#11 above) + \$639.84 (#12 above) = \$6,319.36 for the first 4 year period.

Total cost for continuing education for medical staff of one level I stroke center for annually thereafter - \$100 (#1 above) + \$39.99 (#2 above) + \$100 (#3 above) + \$100 (#4 above) + \$100 (#5 above) + \$300 (#6 above) + \$120 (#7 above) + \$39.99 (#8 above) + \$120 (#9 above) + \$199.95 (#10 above) + \$199.95 (#11 above) + \$159.96 (#12 above) = \$1,579.84 for annually thereafter.

### C. Medical Equipment.

- 1) Electronic communication devices for stroke call roster members - 2 electronic communication devices (cell phone and beeper) X \$300 for the annual cost of each electronic communication device X 2 stroke call roster members (1 on call member and one back-up member) carrying this device X one level I stroke center X 4 years = \$4,800 for the first 4 year period and 2 electronic communication devices (cell phone and beeper) X \$300 for the annual cost of each electronic communication device X 2 stroke call roster members carrying this

device (1 on call member and one back-up member) X one level I stroke center X 1 year = \$1,200 annually thereafter.

- 2) Resuscitation equipment for the neuro-interventional laboratory –a)
  - a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level I stroke center = \$600 X 4 years = \$2,400 for the first 4 year period and at least 2 X \$300 each X one level I stroke center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 packs X one level I stroke center = \$12,500 X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 packs X one level I stroke center X 1 year = \$12,500 annually thereafter.
  - c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs X one level I stroke center = \$12,500 X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 packs X one level I stroke center X 1 year = \$12,500 annually thereafter.
  - d) Sources of oxygen - (air outlet \$70 X 7 = \$490 for the first year for one level I stroke center + \$150 per year X 3 years for upkeep and maintenance of air outlets for one level I stroke center = \$450 for a total of \$940 for air outlets) + (regulator for air outlet \$35 X 25 = \$875 X 4 years for one level I stroke center = \$3,500) + (nasal cannula \$.40 X 500 patients = \$200 X 4 years for one level I stroke center = \$800) + (masks \$2.40 X 500 patients = \$1200 X 4 years for one level I stroke center = \$4,800) + (ambu bags \$10.50 X 100 = \$1050 X 4 years for one level I stroke center = \$4,200) + (oxygen tank \$70 X 300 = \$21,000 X 4 years for one level I stroke center = \$84,000) + (regulator for oxygen tank \$30 X 25 = \$750 X 4 years for one level I stroke center = \$3,000) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X 4 years for one level I stroke center = \$800) = for a total of \$102,040 for the first 4 year period and (annual air outlet upkeep and maintenance for one level I stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level I stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 1 year = \$200) + (masks \$2.40 X 500 = \$1200 X one level I stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 1 year = \$200 for a total of \$25,425 annually thereafter.
  - e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 250 = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period and suction devices canister and tubing for wall suction \$50 X 250 = \$12,500 X one level I stroke center X 1 year = \$12,500 annually thereafter.
  - f) Telemetry - average of \$800 per patient X 500 patients = \$400,000 X one level I stroke center = \$400,000 X 4 years = \$1,600,000 for

- the first 4 year period and \$800 per patient X 500 patients = \$400,000 X one level I stroke center X 1 year = \$400,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level I stroke center = \$37,895 X one year (the first year) = \$37,895 + \$1,500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for the first 4 year period and \$1,500 for the upkeep and maintenance of a electrocardiograph, cardiac monitor and defibrillator for one level I stroke center X 1 year = \$1,500 annually thereafter.
- h) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000) = \$6,000 X one level I stroke center X 4 years = \$24,000 for the first 4 year period and \$6,000 X one level I stroke center X 1 year = \$6,000 annually thereafter.
- i) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium and sulfate \$100 per patient X 100 patients = \$10,000 X one level I stroke center X 4 years = \$40,000 for the first 4 year period and saline, epinephrine, atropine, lidocaine, magnesium and sulfate \$100 per patient X 100 patients = \$10,000 X one level I stroke center X 1 year = \$10,000 annually thereafter.
- j) Supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center = \$3,000 X 4 years = \$12,000 for the first 4 year period and supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center X 1 year = \$3,000 annually thereafter.

Total costs for resuscitation equipment for one level I stroke center for the neuro-interventional laboratory for the first 4 year period - \$2,400 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$102,040 (letter d above) + \$50,000 (letter e above) + \$1,600,000 (letter f above) + \$42,395 (letter g above) + \$24,000 (letter h above) + \$40,000 (letter i above)+ \$12,000 (letter j above) = \$1,972,835 for the first 4 year period.

Total costs for resuscitation equipment for one level I stroke center for the neuro-interventional laboratory for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,425 (letter d above) + \$12,500 (letter e above) + \$400,000 (letter f above) + \$1,500 (letter g above) + \$6,000 (letter h above) + \$10,000 (letter i above)+ \$3,000 (letter j above) = \$484,025 annually thereafter.

- 3) Resuscitation equipment for the emergency department -
- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level I stroke center = \$600 X 4 years = \$2,400 for the first 4 year period and at least 2 X \$300 each = \$600 X one level I stroke center = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 1 year = \$12,500 annually thereafter.
  - c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 1 year = \$12,500 annually thereafter.
  - d) Sources of oxygen - (air outlet \$70 X 7 = \$490 for the first year for one level I stroke center + \$150 per year X 3 years for upkeep and maintenance of air outlets for one level I stroke center = \$450 for a total of \$940 for air outlets) + (nasal cannula \$.40 X 500 patients = \$200 X 4 years for one level I stroke center = \$800) + (masks \$2.40 X 500 patients = \$1,200 X 4 years for one level I stroke center = \$4,800) + (ambu bags \$10.50 X 100 = \$1,050 X 4 years for one level I stroke center = \$4,200) + (oxygen tank \$70 X 300 = \$21,000 X 4 years for one level I stroke center = \$84,000) + (regulator for oxygen tank \$30 X 25 = \$750 X 4 years for one level I stroke center = \$3,000) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X 4 years for one level I stroke center = \$800) for a total of \$98,540 for the first 4 year period and (air outlet upkeep and maintenance \$150 X one level I stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 15 X one level I stroke center X 1 year = \$525) + (nasal cannula \$.40 X 500 patients X one level I stroke center X 1 year = \$200) + (masks \$2.40 X 500 X one level I stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 X one level I stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 X one level I stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 X one level I stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients X one level I stroke center X 1 year = \$200) for a total of \$25,075 annually thereafter.
  - e) Mechanical ventilator - \$7000 X one level I stroke center = \$7000 for the first year and \$1,500 for the annual upkeep and maintenance in the future of one level I stroke center X 3 years = \$4,500 for 3 years for a total of \$11,500 for the first 4 year period and \$1,500 for the upkeep and maintenance for one level I stroke center X 1 year = \$1,500 annually thereafter.
  - f) Suction devices - suction device canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I stroke center = \$25,000 X 4 years = \$100,000 for the first 4 year period and \$50 X 500 patients X one level I stroke center X 1 year = \$25,000 annually thereafter.
  - g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 for the cost of the first year and \$1,500 for the annual upkeep and maintenance of one level I stroke center X 3 years = \$4,500 for a

- total of \$42,395 for the first 4 year period and \$1,500 for upkeep and maintenance X one level I stroke center X 1 year = \$1,500 annually thereafter.
- h) Central line insertion equipment - \$600 X 300 patients = \$180,000 X one level I stroke center = \$180,000 X 4 years = \$720,000 for the first 4 year period and \$600 X 300 patients = \$180,000 X one level I stroke center X 1 year = \$180,000 annually thereafter.
  - i) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 = \$2,000) = \$6,000 X one level I stroke center = \$6,000 X 4 years = \$24,000 for the first 4 year period and \$6,000 X one level I stroke center = \$6,000 annually thereafter.
  - j) Intraosseous devices - needles \$25 each X 300 patients = \$7,500 X one level I stroke center = \$7,500 X 4 years = \$30,000 for the first 4 year period and \$25 each X 300 patients = \$7,500 X one level I stroke center = \$7,500 annually thereafter.
  - k) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 = \$50,000 X one level I stroke center = \$50,000 X 4 years = \$200,000 for the first 4 year period and \$100 X 500 = \$50,000 X one level I stroke center = \$50,000 annually thereafter.
  - l) Two-way communication link with emergency medical service vehicles - \$1,200 apiece X one level I stroke center = \$1,200 for the first year + \$200 for upkeep and maintenance for one level I stroke center X 3 years = \$600 for a total of \$1,800 for the first 4 year period and \$200 for upkeep and maintenance for one level I stroke center = \$200 annually thereafter.
  - m) End-tidal carbon dioxide monitor - \$3,900 X one level I stroke center = \$3,900 for the first year and \$1,500 for the annual upkeep and maintenance for one level I stroke center X 3 years = \$4,500 for a total of \$8,400 for the first 4 year period and \$1,500 for the annual upkeep and maintenance for one level I stroke center X one level I stroke center = \$1,500 annually thereafter.
  - n) Temperature control devices for patient and resuscitation fluids - \$270 pack of 10 (Bair Hugger Therapy) X 30 = \$8,100 X one level I stroke center X 4 years = \$32,400 for the first 4 year period and \$270 pack of 10 (Bair Hugger Therapy) X 30 = \$8,100 X one level I stroke center = \$8,100 annually thereafter.
  - o) Supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center = \$3,000 X 4 years = \$12,000 for the first 4 year period and supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center X 1 year = \$3,000 annually thereafter.

Total costs for resuscitation equipment for one level I stroke center for the emergency room department for the first 4 year period - \$2,400 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$98,540 (letter d above) + \$11,500 (letter e above) + \$100,000 (letter f above) + \$42,395 (letter g above) + \$720,000 (letter h above) + \$24,000 (letter i above) + \$30,000 (letter j above) + \$200,000 (letter k above) + \$1,800 (letter l above) + \$8,400 (letter m above) + \$32,400 (letter n above) + \$12,000 (letter o above) = \$1,383,435 for the first 4 year period.

Total costs for resuscitation equipment for one level I stroke center for the emergency room department for the first 4 year period for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,075 (letter d above) + \$1,500 (letter e above) + \$25,000 (letter f above) + \$1,500 (letter g above) + \$180,000 (letter h above) + \$6,000 (letter i above) + \$7,500 (letter j above) + \$50,000 (letter k above) + \$200 (letter l above) + \$1,500 (letter m above) + \$8,100 (letter n above) + \$3,000 (letter o above) = \$334,975 for annually thereafter.

- 4) Resuscitation equipment for the intensive care unit -
  - a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes, bag-mask resuscitator and a mechanical ventilator - (laryngoscopes at least 2 X \$300 each = \$600 X 4 years X one level I stroke center = \$2,400 for the first 4 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 packs = \$12,500 X 4 years X one level I stroke center = \$50,000 for the first 4 year period) + (bag-mask resuscitator \$250 for a pack of 10 X 50 packs X 4 years X one level I stroke center = \$50,000 for the first 4 year period) + (mechanical ventilator \$7000 X one level I stroke center X 1 year (the first year) + \$1,500 for the upkeep and maintenance of ventilator X 3 years (years 2 through 4) X one level I stroke center = \$4,500 for a total of \$11,500 for the first 4 year period) = for a total of \$113,900 for the first 4 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level I stroke center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 packs X 1 year = \$12,500 X one level I stroke center X 1 year = \$12,500) + (bag-mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 1 year = \$12,500) + (mechanical ventilator \$1500 for upkeep and maintenance X one level I stroke center X 1 year = \$1500) = for a total of \$27,100 annually thereafter.
  - b) Oxygen source with concentration controls - (air outlet \$70 X 7 = \$490 X one level I stroke center X 1 year (the first year) = \$490 + \$150 for upkeep and maintenance of air outlets X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator \$35 X 25 = \$875 X 4 years X one level I stroke center = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 = \$200 X 4 years X one level I stroke center = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X 4 years X

- one level I stroke center = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1,050 X 4 years X one level I stroke center = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X 4 years X one level I stroke center = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 4 years X one level I stroke center = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X 4 years X one level I stroke center = \$800 for the first 4 year period) for a total of \$102,040 for the first 4 year period and (air outlet upkeep and maintenance = \$150 X one level I stroke center X one year = \$150) + (regulator \$35 X 25 = \$875 X one level I stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 = \$200 X one level I stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 x one level I stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center = \$200) for a total of \$25,425 annually thereafter.
- c) Cardiac emergency cart, including medications - \$1600 cart + medications and suction devices \$1000 = \$2,600 X one level I stroke center X 1 year (the first year) = \$2,600 + \$1,000 medications X 3 years (years 2 through 4) = \$3,000 for a total of \$5,600 for the first 4 year period and \$1,000 medications and suction devices X one level I stroke center X 1 year = \$1,000 annually thereafter.
- d) Telemetry, electrocardiograph capability, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X 4 years X one level I stroke center X 1 year = \$1,600,000) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X 1 year (first year) X one level I stroke center = \$37,895 + \$1,500 X 3 years (years 2 through 4) X one level I stroke center = \$4,500 for a total of \$42,395) for a total of \$1,642,395 for the first 4 year period and (telemetry \$800 X 500 patients = \$400,000 X one level I stroke center X 1 year = \$400,000) + (\$1,500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level I stroke center X 1 year = \$1,500) for a total of \$401,500 for one level I stroke center annually thereafter.
- e) Electronic pressure monitoring and pulse oximetry - (electronic pressure monitoring devices \$100 X 25 = \$2,500 X 4 years X one level I stroke center = \$10,000) + (pulse oximetry devices \$100 X 25 = \$2,500 X 4 years X one level I stroke center = \$10,000) for a total of \$20,000 for the first 4 year period and electronic pressure monitoring devices \$100 X 25 X one level I stroke center X 1 year = \$2,500 + pulse oximetry devices \$100 X 25 X one level I stroke center X 1 year = \$2,500 for a total of \$5,000 annually thereafter.
- f) End-tidal carbon dioxide monitor - \$3,900 X one level I stroke center X 1 year (first year) = \$3,900 for the first year + \$1,500 for annual upkeep and maintenance X one level I stroke center X 3



- years (years 2 through 4) = \$4,500 for a total of \$8,400 for the first 4 year period and \$1,500 X one level I stroke center X 1 year = \$1,500 annually thereafter.
- g) Patient weight devices - \$1000 X one level I stroke center X 1 year = \$1,000 (the first year) + \$250 annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$750 for a total of \$1,750 for the first 4 year period and \$250 X one level I stroke center X 1 year = \$250 annually thereafter.
- h) Intravenous fluids - (drugs are already accounted for in letter c above) (all standard intravenous fluids \$4.00 each X 500 patients = \$2,000 X 4 years X one level I stroke center = \$8,000) + (all standard administration devices \$4.00 each X 500 patients = \$2,000 X 4 years X one level I stroke center = \$8,000) + (all standard intravenous catheters \$4.00 each X 500 patients = \$2,000 X 4 years X one level I stroke center = \$8,000) for a total of \$24,000 for the first 4 year period and (all standard intravenous fluids \$4.00 each X 500 patients X 1 year X one level I stroke center = \$2,000 ) + (all standard administration devices \$4.00 each X 500 patients X 1 year X one level I stroke center = \$2,000) + (all standard intravenous catheters \$4.00 each X 500 patients X 1 year X one level I stroke center = \$2,000) for a total of \$6,000 annually thereafter.
- i) Intracranial pressure monitoring devices - digital \$13,000 X one level I stroke center X 1 year (the first year) = \$13,000 for the first year + \$1,500 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$17,500 for the first 4 year period and \$1,500 for annual upkeep and maintenance X one level I stroke center X 1 year = \$1,500 annually thereafter.
- j) Supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center = \$3,000 X 4 years = \$12,000 for the first 4 year period and supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center X 1 year = \$3,000 annually thereafter.

Total costs for resuscitation equipment for one level I stroke center for the intensive care unit for the first 4 year period - \$113,900 (letter a above) + \$102,040 (letter b above) + \$5,600 (letter c above) + \$1,642,395 (letter d above) + \$20,000 (letter e above) + \$8,400 (letter f above) + \$1,750 (letter g above) + \$24,000 (letter h above) + \$17,500 (letter i above) + \$12,000 (letter j above) = \$1,947,585 for the first 4 year period.

Total costs for resuscitation equipment for one level I stroke center for the intensive care unit for annually thereafter - \$27,100 (letter a above) + \$25,425 (letter b above) + \$1,000 (letter c above) + \$401,500 (letter d above) + \$5,000 (letter e above) + \$1,500 (letter



f above) + \$250 (letter g above) + \$6,000 (letter h above) + \$1,500 (letter i above) + \$3,000 (letter j above) = \$472,275 for annually thereafter.

**5) Stroke center stroke unit resuscitation equipment -**

**a) Airway control and ventilation equipment including**

**laryngoscopes, endotracheal tubes of all sizes - (laryngoscopes at least 2 X \$300 each = \$600 X one level I stroke center X 4 years = \$2,400 for the first 4 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period) + (mechanical ventilator \$7000 X one level I stroke center X 1 year (the first year) + \$1,500 for annual upkeep and maintenance of ventilator X one level I stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$11,500) for a total of \$63,900 for the first 4 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level I stroke center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I stroke center X 1 year = \$12,500) + (mechanical ventilator \$1,500 annual upkeep and maintenance X one level I stroke center X 1 year = \$1,500) for a total of \$14,600 annually thereafter.**

**b) Bag-mask resuscitator and sources of oxygen - (bag mask**

**resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period) + (air outlet \$70 X 7 = \$490 X one level I stroke center X 1 year (the first year) + \$150 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level I stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level I stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 4 years = \$800 for the first 4 year period) for a total of \$152,040 for the first 4 year period and (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 1 year = \$12,500) + (air outlet \$150 for annual upkeep and maintenance X one level I stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level I stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I**

- stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 1 year = \$200) for a total of \$37,925 annually thereafter.
- c) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I stroke center X 4 years = \$100,000 for the first 4 year period and \$25,000 X one level I stroke center = \$25,000 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X one level I stroke center X 4 years = \$1,600,000 for the first 4 year period) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X one level I stroke center X 1 year (the first year) + \$1,500 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for the first 4 year period) for a total of \$1,642,395 for the first 4 year period and (telemetry \$800 X 500 patients = \$400,000 X one level I stroke center X 1 year = \$400,000) + (\$1,500 for annual upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level I stroke center X 1 year = \$1,500) for a total of \$401,500 annually thereafter.
- e) All standard intravenous fluids and administration devices and intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period) for a total of \$24,000 for the first 4 year period (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I stroke center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I stroke center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I stroke center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- f) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 100 patients = \$10,000 X one level I stroke center X 4 years = \$40,000 for the first 4 year period and \$10,000 X one level I stroke center X 1 year = \$10,000 annually thereafter.
- g) Supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center = \$3,000 X 4 years = \$12,000 for the first 4 year period and supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center X 1 year = \$3,000 annually thereafter.

**Total cost for resuscitation equipment for one level I stroke center stroke unit for the first 4 year period - \$63,900 (letter a above) + \$152,040 (letter b above) + \$100,000 (letter c above) + \$1,642,395 (letter d above) + \$24,000 (letter e above) + \$40,000 (letter f above) + \$12,000 (letter g above) = \$2,034,335 for the first 4 year period.**

**Total cost for resuscitation equipment for one level I stroke center stroke unit for annually thereafter - \$14,600 (letter a above) + \$37,925 (letter b above) + \$25,000 (letter c above) + \$401,500 (letter d above) + \$6,000 (letter e above) + \$10,000 (letter f above) + \$3,000 (letter g above) = \$498,025 annually thereafter.**

- 6) Angiography with interventional capability available 24 hours a day, 7 days a week, in-house computerized tomography, computerized tomography perfusion, computerized tomography angiography - \$1,000,000 average for computerized tomography (CT) machine with these capabilities = \$1,000,000 X one level I stroke center X 1 year (the first year) = \$1,000,000 for the first year + \$200,000 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$600,000 for a total of \$1,600,000 for the first 4 year period and \$200,000 for annual upkeep and maintenance X one level I stroke center X 1 year = \$200,000 annually thereafter.**
- 7) Magnetic resonance imaging, magnetic resonance angiogram/magnetic resonance venography - average cost \$2,000,000 for MRI machine with these capabilities = \$2,000,000 X one level I stroke center X 1 year (the first year) = \$2,000,000 for the first year) + \$400,000 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$1,200,000 for a total of \$3,200,000 for the first 4 year period and \$400,000 for annual upkeep and maintenance X one level I stroke center X 1 year = \$400,000 annually thereafter.**
- 8) Extra cranial ultrasound, trans thoracic echo and trans esophageal echo-average \$35,000 for ultrasound machine - \$35,000 X one level I stroke center X 1 year (the first year) = \$35,000 for the first year + \$2,000 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$6,000) = for a total of \$41,000 for the first 4 year period and \$2,000 for annual upkeep and maintenance X one level I stroke center X 1 year = \$2,000 annually thereafter.**
- 9) Equipment to evaluate for vasospasm - \$6,000 X one level I stroke center X 1 year (the first year) = \$6,000 for the first year + \$750.00 for upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$2,250 for a total of \$8,250 for the first 4 year period and \$750.00 for upkeep and maintenance X one level I stroke center X 1 year = \$750.00 annually thereafter.**

- 10) Resuscitation equipment for the radiology department-**

- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level I stroke center X 4 years = \$2,400 for the first 4 year period and at least 2 X \$300 each = \$600 X one level I stroke center X 1 year = \$600 annually thereafter.
- b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 X one level I stroke center X 1 year = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 packs X one level I stroke center = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level I stroke center X 1 year (the first year) = \$490 for the first year + \$150 annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level I stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level I stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 4 years = \$800 for the first 4 year period) for a total of \$102,040 for the first 4 year period and (air outlet \$70 X 7 = \$490 X one level I stroke center X 1 year = \$490) + (regulator for air outlet \$35 X 25 = \$875 X one level I stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 1 year = \$200) for a total of \$25,765 for annually thereafter.
- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I stroke center X 4 years = \$100,000 for the first 4 year period and \$50 X 500 X one level I stroke center X 1 year = \$25,000 annually thereafter.
- f) Telemetry - average of \$800 X 500 patients = \$400,000 X one level I stroke center X 4 years = \$1,600,000 for the first year

- period and \$800 X 500 patients X one level I stroke center X 1 year = \$400,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level I stroke center = \$37,895 X one level I stroke center X 1 year (first year) = \$37,895 for the first year + \$1,500 for the annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for the first 4 year period and \$1,500 for the annual upkeep and maintenance X one level I stroke center X 1 year = \$1,500 for annually thereafter.
  - h) All standard administration devices - \$4.00 each X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period and \$2,000 X one level I stroke center X 1 year = \$2,000 annually thereafter.
  - i) All standard intravenous catheters - \$4.00 each X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period and \$2,000 X one level I stroke center X 1 year = \$2,000 annually thereafter.
  - j) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level I stroke center X 4 years = \$200,000 for the first 4 year period and \$50,000 X one level I stroke center X 1 year = \$50,000 annually thereafter.
  - k) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level I stroke center X 4 years = \$100,000 for the first 4 year period and \$25,000 X one level I stroke center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level I stroke center for the radiology department for the first 4 year period - \$2,400 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$102,040 (letter d above) + \$100,000 (letter e above) + \$1,600,000 (letter f above) + \$42,395 (letter g above) + \$8,000 (letter h above) + \$8,000 (letter i above) + \$200,000 (letter j above) + \$100,000 (letter k above) = \$2,262,835 for the first 4 year period.

Total cost for resuscitation equipment for one level I stroke center for the radiology department for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,765 (letter d above) + \$25,000 (letter e above) + \$400,000 (letter f above) + \$1,500 (letter g above) + \$2,000 (letter h above) + \$2,000 (letter i above) + \$50,000 (letter j above) + \$25,000 (letter k above) = \$556,865 for annually thereafter.

**11) Operating rooms shall have at least the following equipment:**

- a) Operating microscope - \$15,000 X one level I stroke center X 1 year (first year) = \$15,000 for the first year + \$1,500 for annual upkeep and maintenance X one level I stroke center X 3 years

(years 2 through 4) = \$4,500 for a total of \$19,500 for the first 4 year period and \$1,500 for annual upkeep, repair and maintenance X one level I stroke center X 1 year = \$1,500 annually thereafter.

- b) Thermal control equipment for patient and resuscitation fluids - (temperature control devices \$2,750 each X 2 = \$5,500 X one level I stroke center X 1 year (the first year) = for a total of \$5,500 for the first year + \$2,750 X 1 = \$2,750 for replacement X 3 years X one level I stroke center = \$8,250 for a total of \$13,750 for the first 4 year period ) + (blankets \$270 pack of 10 X 50 = \$13,500 X one level I stroke center X 4 years = \$54,000 for the first 4 year period) + (resuscitation fluids \$50 X 500 patients = \$25,000 X one level I stroke center X 4 years = \$100,000 for the first 4 year period) for a total of \$167,750 for the first 4 year period and (temperature control devices \$2,750 each X 1 X 1 year = \$2,750 for replacement X one level I stroke center = \$2,750) + (blankets \$270 pack of 10 X 50 = \$13,500 X one level I stroke center X 1 year = \$13,500) + (resuscitation fluids \$50 X 500 patients = \$25,000 X one level I stroke center = \$25,000) for a total of \$41,250 for annually thereafter.
- c) Instruments necessary to perform an open craniotomy - \$1,500 X one level I stroke center X 4 years = \$6,000 for the first 4 year period and \$1500 X one level I stroke center X 1 year = \$1,500 annually thereafter.
- d) Monitoring equipment - \$4,000 X one level I stroke center X 1 year (the first year) = \$4,000 for the first year + \$500 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4 = \$1,500 for a total of \$5,500 for the first 4 year period and \$500 for annual upkeep and maintenance X one level I stroke center X 1 year = \$500 annually thereafter.

Total cost for operating room equipment for one level I stroke center for the first 4 year period - \$19,500 (letter a above) + \$167,750 (letter b above) + \$6,000 (letter c above) + \$5,500 (letter d above) = \$198,750 for the first 4 year period.

Total cost for operating room equipment for one level I stroke center for annually thereafter - \$1,500 (letter a above) + \$41,250 (letter b above) + \$1,500 (letter c above) + \$500 (letter d above) = \$44,750 for annually thereafter.

**12) Resuscitation equipment available to the operating room-**

- a.) Laryngoscopes - at least 2 X \$300 each = \$600 X one level I stroke center X 4 years = \$2,400 for the first 4 year period and \$600 X one level I stroke center X 1 year = \$600 annually thereafter.
- b.) Endotracheal tubes of all sizes - 250 for a pack of 10 X 50 = \$12,500 X one level I stroke center X 4 years = \$50,000 for the

- first 4 year period and \$12,500 X one level I stroke center X 1 year = \$12,500 annually thereafter.
- c.) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period and \$12,500 X one level I stroke center X 1 year = \$12,500 annually thereafter.
- d.) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level I stroke center X 1 year (the first year) = \$490 for the first year + air outlet annual upkeep and maintenance \$150 X one level I stroke center X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level I stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level I stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 4 years = \$800 for the first 4 year period) for a total of \$102,040 for the first 4 year period and (air outlet annual upkeep and maintenance \$150 X one level I stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level I stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 1 year = \$200) for a total of \$25,425 annually thereafter.
- e.) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I stroke center X 4 years = \$100,000 for the first 4 year period and \$25,000 X one level I stroke center X 1 year = \$25,000 annually thereafter.
- f.) Telemetry - average of \$800 X 500 patients = \$400,000 X one level I stroke center X 4 years = \$1,600,000 for the first 4 year period and \$400,000 X one level I stroke center X 1 year = \$400,000 annually thereafter.
- g.) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level I stroke center X 1 year (the first year) = \$37,895 + \$1,500 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for the first 4 year period and \$1,500 for the annual upkeep and

maintenance X one level I stroke center X 1 year = \$1,500 annually thereafter.

- h) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period) for a total of \$24,000 for the first 4 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I stroke center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I stroke center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I stroke center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- i) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level I stroke center X 4 years = \$200,000 for the first 4 year period and \$100 X 500 patients X one level I stroke center X 1 year = \$50,000 annually thereafter.
- j.) Supplies necessary for emergency care (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level I stroke center X 4 years = \$100,000 for the first 4 year period and \$50 X 500 patients = \$25,000 X one level I stroke center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level I stroke center for the operating room for the first 4 year period - \$2,400 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$102,040 (letter d above) + \$100,000 (letter e above) + \$1,600,000 (letter f above) + \$42,395 (letter g above) + \$24,000 (letter h above) + \$200,000 (letter i above) + \$100,000 (letter j above) = \$2,270,835 for the first 4 year period.

Total cost for resuscitation equipment for one level I stroke center for the operating room for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,425 (letter d above) + \$25,000 (letter e above) + \$400,000 (letter f above) + \$1,500 (letter g above) + \$6,000 (letter h above) + \$50,000 (letter i above) + \$25,000 (letter j above) = \$558,525 annually thereafter.

**13) Resuscitation equipment for the Post-Anesthesia Recovery room (PAR)-**

- a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes, bag-mask



resuscitator, sources of oxygen and a mechanical ventilator - (laryngoscopes at least 2 X \$300 each = \$600 X one level I stroke center X 4 years = \$2,400 for the first 4 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period) + (bag-mask resuscitator \$250 for a pack of 10 X 50 = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period) + (mechanical ventilator \$7000 X one level I stroke center X 1 year (the first year) = \$7,000 + \$1,500 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$11,500 for the first 4 year period) + (air outlet \$70 X 7 = \$490 X one level I stroke center X 1 year (the first year) = \$490 + \$150 for annual upkeep and maintenance X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator \$35 X 25 = \$875 X one level I stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 patients = \$1,050 X one level I stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 4 years = \$800 for the first 4 year period) for a total of \$215,940 for the first 4 year period and (laryngoscopes at least two X \$300 each = \$600 X one level I stroke center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I stroke center X 1 year = \$12,500) + (bag-mask resuscitator \$250 for a pack of 10 X 50 = \$12,500 X one level I stroke center X 1 year = \$12,500) + (mechanical ventilator \$1,500 for annual upkeep and maintenance X one level I stroke center X 1 year = \$1,500) + (air outlet \$150 for annual upkeep and maintenance X one level I stroke center X 1 year = \$150) + (regulator \$35 X 25 = \$875 X one level I stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 patients = \$1,050 X one level I stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 1 year = \$200) for a total of \$52,525 annually thereafter.

- b) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I stroke center X 4 years = \$100,000 for the first 4 year period and \$50 X 500

patients X one level I stroke center X 1 year = \$25,000 annually thereafter.

- c) Telemetry, electrocardiograph capability, cardiac monitor and defibrillator - (telemetry average \$800 X 500 patients = \$400,000 X one level I stroke center X 4 years = \$1,600,000 for the first 4 year period) + (electrocardiograph, cardiac monitor and defibrillator \$37,895 X one level I stroke center X 1 year (the first year) = \$37,895 for the first year + \$1,500 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for electrocardiograph, cardiac monitor and defibrillator) for a total of \$1,642,395 for the first 4 year period and telemetry average \$800 X 500 patients = \$400,000 X one level I stroke center X 1 year = \$400,000 + \$1,500 for annual upkeep and maintenance X one level I stroke center X 1 year = \$401,500 annually thereafter.
- d) All standard intravenous fluids and administration devices, including intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard administration devices X 500 patients X one level I stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period) for a total of \$24,000 for the first 4 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I stroke center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients X one level I stroke center X 1 year = \$2,000 for the first 4 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I stroke center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- e) Drugs necessary for emergency care - saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level I stroke center X 4 years = \$200,000 for the first 4 year period and \$50,000 X one level I stroke center X 1 year = \$50,000 annually thereafter.
- f) Supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center = \$3,000 X 4 years = \$12,000 for the first 4 year period and supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center X 1 year = \$3,000 annually thereafter.

Total cost for resuscitation equipment for one level I stroke center for the post-anesthesia recovery room (PAR) for the first 4 year period - \$215,940 (letter a above) + \$100,000 (letter b above) + \$1,642,395

(letter c above) + \$24,000 (letter d above) + \$200,000 (letter e above) + \$12,000 (letter f above) = \$2,194,335 for the first 4 year period.

Total cost for resuscitation equipment for one level I stroke center for the post-anesthesia recovery room (PAR) for annually thereafter - \$52,525 (letter a above) + \$25,000 (letter b above) + \$401,500 (letter c above) + \$6,000 (letter d above) + \$50,000 (letter e above) + \$3,000 (letter f above) = \$538,025 for annually thereafter.

**14) Laboratory Services-**

- a) Standard analyses of blood, urine and other body fluids - costs of materials \$200 X 500 patients = \$100,000 X one level I stroke center X 4 years = \$400,000 for the first 4 year period and \$200 X 500 patients X one level I stroke center X 1 year = \$100,000 annually thereafter.
- b) Blood typing and cross matching - centrifuge \$2000 X one level I stroke center X 1 year (the first year) = \$2,000 + \$250 for the annual upkeep and maintenance of the centrifuge X one level I stroke center X 3 years (years 2 through 4) = \$750 for a total of \$2,750 for the first 4 year period and \$250 for the annual upkeep and maintenance of the centrifuge X one level I stroke center X 1 year = \$250 annually thereafter.
- c) Coagulation studies - \$200 materials X 250 patients = \$50,000 X one level I stroke center X 4 years = \$200,000 for the first 4 year period and \$200 materials X 250 patients = \$50,000 X one level I stroke center X 1 year = \$50,000 annually thereafter.
- d) Blood bank or access to a community central blood bank and adequate hospital blood storage facilities - at the least blood storage refrigerators 1 large refrigerator/use of community central blood bank at \$15,000 X one level I stroke center X 1 year (the first year) = \$15,000 + \$1,500 for the annual upkeep and maintenance of the blood storage refrigerator X one level I stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$19,500 for the first 4 year period and \$1,500 for the annual upkeep and maintenance of the blood storage refrigerator X one level I stroke center X 1 year = \$1,500 annually thereafter.
- e) Blood gases and pH determinations - at least one blood gas analyzer and kit \$3000 X one level I stroke center X 4 years = \$12,000 for the first 4 year period and \$3,000 X one level I stroke center X 1 year = \$3,000 annually thereafter.
- f) Blood chemistries - test and kits average of \$350 X 100 patients = \$35,000 X one level I stroke center X 4 years = \$140,000 for the first 4 year period and \$350 X 100 patients X one level I stroke center X 1 year = \$35,000 annually thereafter.

Total cost for laboratory services for one level I stroke center for the first 4 year period - \$400,000 (letter a above) + \$ 2,750 (letter b above) + \$200,000 (letter c above) + \$19,500 (letter d above) + \$12,000 (letter

e above) + \$140,000 (letter f above) = \$ 774,250 for the first 4 year period.

Total cost for laboratory services for one level I stroke center for annually thereafter - \$100,000 (letter a above) + \$250 (letter b above) + \$50,000 (letter c above) + \$1,500 (letter d above) + \$3,000 (letter e above) + \$35,000 (letter f above) = \$189,750 for annually thereafter.

Total cost for medical equipment for one level I stroke center for the first 4 year period - \$4,800 (number 1 above) + \$1,972,835 (number 2 above) + \$1,383,435 (number 3 above) + \$1,947,585 (number 4 above) + \$2,034,335 (number 5 above) + \$1,600,000 (number 6 above) + \$3,200,000 (number 7 above) + \$41,000 (number 8 above) + \$8,250 (number 9 above) + \$2,262,835 (number 10 above) + \$198,750 (number 11 above) + \$2,270,835 (number 12 above) + \$2,194,335 (number 13 above) + \$774,250 (number 14 above) = \$19,893,245 for the first 4 year period.

Total cost for medical equipment for one level I stroke center for annually thereafter - \$1,200 (number 1 above) + \$484,025 (number 2 above) + \$334,975 (number 3 above) + \$472,275 (number 4 above) + \$498,025 (number 5 above) + \$200,000 (number 6 above) + \$400,000 (number 7 above) + \$2,000 (number 8 above) + \$750 (number 9 above) + \$556,865 (number 10 above) + \$44,750 (number 11 above) + \$558,525 (number 12 above) + \$538,025 (number 13 above) + \$189,750 (number 14 above) = \$4,281,165 for annually thereafter.

D. The stroke center shall have support services to assist the patient's family from time of entry into the facility to time of discharge - at least 1 full time equivalent medical social worker \$66,000 annually X one level I stroke center X 4 years = \$264,000 for the first 4 year period and \$66,000 X one level I stroke center X 1 year = \$66,000 for annually thereafter.

E. The stroke center shall have a stroke rehabilitation program or plan to refer those stroke patients that require rehabilitation to another facility or community agency that can provide necessary services - (at least 1 physical therapist \$74,075 annually X one level I stroke center X 4 years = \$296,300 for the first 4 year period) + (occupational therapist \$72,763 annually X one level I stroke center X 4 years = \$291,052 for the first 4 year period) + (speech therapist/pathologist \$67,834 annually X one level I stroke center X 4 years = \$271,336 for the first 4 year period) = for a total of \$858,688 for the first 4 year period and \$74,075 + \$72,763 + \$67,834 = \$214,672 X one level I stroke center X 1 year = \$214,672 for annually thereafter.

F. Courses/conferences for physicians who are not board certified.

1) National or international stroke course registration (\$1,200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level I stroke center X 4 years = \$0 for the first 4

year period and  $\$2,950 \times \text{no level I stroke center} \times 1 \text{ year} = \$0$  annually thereafter.

- 2) Regional stroke course or conference -  $(\$700 \text{ registration fee}) + (\text{hotel } \$600) + (\text{food } \$200) + (\text{incidental expenses } \$250) = \$1,750 \times \text{one level I stroke center} \times 2 \text{ (one conference every two years)} = \$3,500$  for the first 4 year period and  $\$1,750 \times \text{one level I stroke center} \times 1 \text{ year} = \$1,750$  annually thereafter.
- 3) State stroke course or conference -  $(\$300 \text{ registration fee}) + (\text{hotel } \$400) + (\text{food } \$200) + (\text{incidental expenses } \$250) = \$1,150 \times \text{no level one stroke centers} \times 4 \text{ years} = \$0$  for the first 4 year period and  $\$1,150 \times \text{no level I stroke center} \times 1 \text{ year} = \$0$  annually thereafter.

**G. Courses/conferences for program manager.**

- 1) National or international stroke course or conference -  $(\$1200 \text{ registration fee}) + (\text{hotel } \$1000) + (\text{food } \$500) + (\text{incidental expenses } \$250) = \$2,950 \times \text{no level I stroke center} \times 4 \text{ years} = \$0$  for the first 4 year period and  $\$2,950 \times \text{no level I stroke center} \times 1 \text{ year} = \$0$  annually thereafter.
- 2) Regional stroke course or conference -  $(\$700 \text{ registration fee}) + (\text{hotel } \$600) + (\text{food } \$200) + (\text{incidental expenses } \$250) = \$1,750 \times \text{one level I stroke center} \times 2 \text{ (one conference every two years)} = \$3,500$  for the first 4 year period and  $\$1,750 \times \text{one level I stroke center} \times 1 \text{ year} = \$1,750$  annually thereafter.
- 3) State stroke course or conference -  $(\$300 \text{ registration fee}) + (\text{hotel } \$400) + (\text{food } \$200) + (\text{incidental expenses } \$250) = \$1,150 \times \text{no level I stroke center} \times 4 \text{ years} = \$0$  for the first 4 year period and  $\$1,150 \times \text{no level I stroke center} \times 1 \text{ year} = \$0$  annually thereafter.

**H. Stroke registry**

- 1) Computer with internet capability/access  $\$600 \text{ computer} + \text{internet fee } \$100/\text{month} \times 12 = \$1,200$  annually  $\times \text{one level I stroke center} \times 4 \text{ years} = \$7,200$  for the first 4 year period and  $\$1,800 \times \text{one level I stroke center} \times 1 \text{ year} = \$1,800$  annually thereafter.
- 2) Patient registrar -  $\$36,258$  annually  $\times \text{one level I stroke center} \times 4 \text{ years} = \$145,032$  for the first 4 year period and  $\$36,258 \times \text{one level I stroke center} \times 1 \text{ year} = \$36,258$  annually thereafter.
- 3) Training to set up stroke registry system/program for data entry -  $\$200$  annually  $\times \text{one level I stroke center} \times 4 \text{ years} = \$800$  for the first 4 year period and  $\$200 \times \text{one level I stroke center} \times 1 \text{ year} = \$200$  annually thereafter.

- I. Public education program to promote stroke prevention and stroke symptoms awareness - e.g. community health fairs costs of printing and advertisement costs (posters, brochures etc...)  $\$350$  for each health fair  $\times 12 \text{ health fairs annually} = \$4,200$  annually  $\times \text{one level I stroke center} \times 4 \text{ years} = \$16,800$  for the first 4 year period and  $\$4,200 \times \text{one level I stroke center} \times 1 \text{ year} = \$4,200$  annually thereafter.

- J. Patient education program to promote stroke prevention and stroke symptoms awareness - printing costs of brochures etc... \$500 annually X one level I stroke center X 4 years = \$2,000 for the first 4 year period and \$500 X one level I stroke center X 1 year = \$500 annually thereafter.**
- K. Professional education outreach program in catchment areas to provide training and other supports to improve care of stroke patients - e.g. hospitals sponsor at least 1 conference per year within their service area at the cost of \$2000 annually X one level I stroke center X 4 years = \$8,000 for the first 4 year period and \$2,000 X one level I stroke center = \$2,000 annually thereafter.**
- L. Stroke centers shall be actively involved in local and regional EMS systems by providing training and clinical educational resources - hospitals sponsor at least 1 conference per year within their area for EMS at the cost of \$2,000 annually X one level I stroke center X 4 years = \$8,000 for the first 4 year period and \$2,000 X one level I stroke center X one year = \$2,000 annually thereafter.**
- M. Report of findings presented at regional, state or national meetings – (\$500 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,550 X one level I stroke center X 4 years = \$6,200 for the first 4 year period and \$1,550 X one level I stroke center X 1 year = \$1,500 annually thereafter.**
- N. A lighted designated helicopter landing area at the stroke center to accommodate incoming medical helicopters which shall be cordoned off at all times from the general public. The stroke center shall also have a landing area on the hospital premises no more than three (3) minutes from the emergency room - (construction of helipad estimate of \$36,000 X 1 helipad X one level I stroke center X 1 year (the first year) = \$36,000) + (maintenance and upkeep of helipad \$2,000 X 3 years (years 2 through 4) X one level I stroke center = \$6,000) for a total of \$42,000 for the first 4 year period for the helipad + (cordoning barrier \$4,300 X 1 year (the first year) X one level I stroke center = \$4,300) + \$500 for maintenance and upkeep of the cordoning barrier X 3 years (years 2 through 4) X one level I stroke center = \$1,500) for a total of \$5,800 for the first 4 year period for the cordoning barrier for a total of \$47,800 for the first 4 year period and \$2,000 for maintenance and upkeep of helipad + \$500 for maintenance and upkeep of the cordoning barrier = \$2,500 X 1 year X one level I stroke center = \$2,500 annually thereafter.**

**Total cost for one level I stroke center for the first 4 year period -**  
**[\$35,349,192 letter A] + [\$6,319.36 letter B] + [\$19,893,245 letter C] + [\$264,000 letter D] + [\$858,688 letter E] + [\$3,500 letter F] +**  
**[\$3,500 letter G] + [\$153,032 letter H] + [\$16,800 letter I] +**  
**[\$2,000 letter J] + [\$8,000 letter K] + [\$8,000 letter L] + [\$6,200**

letter M] + [\$47,800 letter N] = \$56,620,276 for the first 4 year period.

Total cost for one level I stroke center for annually thereafter -  
[\$8,837,298 letter A] + [\$1,579.84 letter B] + [4,281,165 letter C]  
[\$66,000 letter D] + [\$214,672 letter E] + [\$1,750 letter F] + [\$1,750  
letter G] + [\$38,258 letter H] + [\$4,200 letter I] + [\$500 letter J] +  
[\$2,000 letter K] + [\$2,000 letter L] + [\$1,500 letter M] + [\$2,500  
letter N] = \$13,455,172 for annually thereafter.

It is expected that one level I stroke center will be designated during the first 4 year period (\$56,620,276) and that same level I stroke center will be designated again at some time (4 year intervals) annually thereafter (\$13,455,172).

**2. Level II stroke centers.**

**A. Medical Professionals.**

- 1) A physician experienced in diagnosing and treating cerebrovascular diseases - \$204,430 annually X 4 years X one level II stroke center = \$817,720 for the first 4 year period and \$204,430 annually X one level II stroke center X 1 year = \$204,430 annually thereafter.
- 2) At least one other health care professional or qualified individual credentialed in stroke patient care - \$126,046 annually X 4 years X one level II stroke center = \$504,184 for the first 4 year period and \$126,046 X one level II stroke center X 1 year = \$126,046 annually thereafter.
- 3) Stroke center medical director who is recommended to be a board certified or board admissible physician with training and expertise in cerebrovascular diseases - \$204,430 annually X 4 years X one level II stroke center = \$817,720 for the first 4 year period and \$204,430 annually X one level II stroke center X 1 year = \$204,430 annually thereafter.
- 4) Stroke program manager/coordinator who is a registered nurse or a qualified individual - \$126,046 annually X 4 years X one level II stroke center = \$504,184 for the first 4 year period and \$126,046 annually X one level II stroke center X 1 year = \$126,046 annually thereafter.
- 5) Physician with board certification in physical medicine and rehabilitation or by other properly trained individuals (e.g. neurologist experienced in stroke rehabilitation) to direct the stroke center's rehabilitation services - \$200,339 annually X 4 years X one level II stroke center = \$801,356 for the first 4 year period and \$200,339 annually X one level II stroke center X 1 year = \$200,339 annually thereafter.
- 6) Neurosurgeon and back-up coverage on the call roster or available within two (2) hours by transfer agreement - \$468,766 annually X 4 years X one level II stroke center = \$1,875,064 for the first 4 year

- period and \$468,766 annually X one level II stroke center X 1 year = \$468,766 annually thereafter.
- 7) An internal medicine physician - \$181,823 annually X 4 years X one level II stroke center = \$727,292 for the first 4 year period and \$181,823 annually X one level II stroke center X 1 year = \$181,823 annually thereafter.
  - 8) A diagnostic radiologist - \$402,539 annually X 4 years X one level II stroke center = \$1,610,156 for the first 4 year period and \$402,539 annually X one level II stroke center X 1 year = \$402,539 annually thereafter.
  - 9) An anesthesiologist - \$331,932 annually X 4 years X one level II stroke center = \$1,327,728 for the first 4 year period and \$331,932 annually X one level II stroke center X 1 year = \$331,932 annually thereafter.
  - 10) Anesthesiology residents - \$61,000 annually X 4 years X one level II stroke center = \$244,000 for the first 4 year period and \$61,000 annually X one level II stroke center X 1 year = \$61,000 annually thereafter.
  - 11) Certified nurse anesthetists - \$155,095 annually X 4 years X one level II stroke center = \$620,380 for the first 4 year period and \$155,095 annually X one level II stroke center X 1 year = \$155,095 annually thereafter.
  - 12) Anesthesia assistants - \$120,000 annually X 4 years X one level II stroke center = \$480,000 for the first 4 year period and \$120,000 X one level II stroke center X 1 year = \$120,000 annually thereafter.
  - 13) Emergency department physician credentialed for stroke care by the stroke center 24 hours a day, 7 days a week - \$244,973 annually X 4 years X 3 emergency department physicians X one level II stroke center = \$2,939,676 for the first 4 year period and \$244,973 annually X 3 emergency department physicians X one level II stroke center X 1 year = \$734,919 annually thereafter.
  - 14) Registered nurses in the emergency department - \$64,533 annually X 5 registered nurses in the emergency department X 4 years X one level II stroke center = \$1,290,660 for the first 4 year period and \$64,533 annually X 5 registered nurses in the emergency department X one level II stroke center X 1 year = \$322,665 annually thereafter.
  - 15) Medical director of the emergency department - \$199,038 annually X 4 years X one level II stroke center = \$796,152 for the first 4 year period and \$199,038 annually X one level II stroke center X 1 year = \$199,038 annually thereafter.
  - 16) An intensive care unit medical director for stroke center intensive care unit - \$177,560 annually X 4 years X one level II stroke center = \$710,240 for the first 4 year period and \$177,560 annually X one level II stroke center X 1 year = \$177,560 annually thereafter.
  - 17) The stroke center intensive care unit shall have a physician on duty or available 24 hours a day 7 days a week - \$244,553 annually X 3 stroke center intensive care unit physicians X 4 years X one level II stroke center = \$2,934,636 for the first 4 year period and \$244,553 annually X 3 stroke center intensive care unit physicians



X one level II stroke center X 1 year = \$733,659 annually thereafter.

- 18) The stroke center intensive care unit shall have a 1 to 1 or 1 to 2 registered nurse/patient ratio used for critically ill patients requiring intensive care unit level of care - \$67,623 annually X 5 registered nurses in the stroke center intensive care unit X 4 years X one level II stroke center = \$1,352,460 for the first 4 year period and \$67,623 annually X 5 registered nurses in the stroke center intensive care unit X one level II stroke center X 1 year = \$338,115 annually thereafter.
- 19) Stroke unit medical director - \$177,560 annually X 4 years X one level II stroke center = \$710,240 for the first 4 year period and \$177,560 annually X one level II stroke center X 1 year = \$177,560 annually thereafter.
- 20) Physician on duty or available 24 hours a day, 7 days a week in the stroke center stroke unit - \$177,560 annually X 3 physicians in the stroke center stroke unit X 4 years X one level II stroke center = \$2,130,720 for the first 4 year period and \$177,560 annually X 3 physicians in the stroke center stroke unit X one level II stroke center X 1 year = \$532,680 annually thereafter.
- 21) Stroke center stroke unit shall have registered nurses and other essential personnel on duty 24 hours a day 7 days a week - \$65,097 annually for the registered nurse X 4 registered nurses in the stroke center stroke unit X 4 years X one level II stroke center = \$1,041,552 for the first 4 year period and \$65,097 annually for the registered nurse X 4 registered nurses X one level II stroke center X 1 year = \$260,388 annually thereafter.
- 22) Magnetic resonance imaging technologist on call and available within 60 minutes, 24 hours a day, 7 days a week - \$59,750 annually X 4 magnetic resonance imaging technologists X 4 years X one level II stroke center = \$956,000 for the first 4 year period and \$59,750 annually X 4 magnetic resonance imaging technologists X one level II stroke center X 1 year = \$239,000 annually thereafter.
- 23) The stroke center post-anesthesia recovery room with neurosurgical capability shall have registered nurses and other essential personnel on call and available within 60 minutes 24 hours a day 7 days a week - \$65,097 annually X 4 registered nurses X 4 years X one level II stroke center = \$1,041,552 for the first 4 year period and \$65,097 annually X 4 registered nurses X one level II stroke center X 1 year = \$260,388 annually thereafter.
- 24) Computerized tomography technologist - \$58,895 annually X 4 computerized tomography technologists X 4 years X one level II stroke center = \$942,320 for the first 4 year period and \$58,895 annually X 4 computerized tomography technologists X one level II stroke center X 1 year = \$235,580 annually thereafter.
- 25) Neurologist/radiologist - average \$300,000 annually X 3 neurologist/radiologists X 4 years X one level II stroke center = \$3,600,000 for the first 4 year period and \$300,000 annually X 3

neurologist/radiologists X one level II stroke center X 1 year = \$900,000 annually thereafter.

- 26) Transport nurse/radiology technician - average \$62,000 annually X 4 years X one level II stroke center = \$248,000 for the first 4 year period and \$62,000 annually X one level II stroke center X 1 year = \$62,000 annually thereafter.
- 27) Scrub nurse \$68,655 annually X 4 scrub nurses X 4 years X one level II stroke center = \$1,098,480 for the first 4 year period and \$68,655 annually X 4 scrub nurses X one level II stroke center X 1 year = \$274,620 annually thereafter.
- 28) Nurse educator/supervisor to ensure staff are trained on core competencies - \$78,500 annually X 4 years X one level II stroke center = \$314,000 for the first 4 year period and \$78,500 annually X one level II stroke center X 1 year = \$78,500 thereafter.

Total salary cost for medical professionals for one level II stroke center for the first 4 year period - \$817,720 (#1 above) + \$504,184 (#2 above) + \$817,720 (#3 above) + \$504,184 (#4 above) + \$801,356 (#5 above) + \$1,875,064 (#6 above) + \$727,292 (#7 above) + \$1,610,156 (#8 above) + \$1,327,728 (#9 above) + \$244,000 (#10 above) + \$620,380 (#11 above) + \$480,000 (#12 above) + \$2,939,676 (#13 above) + \$1,290,660 (#14 above) + \$796,152 (#15 above) + \$710,240 (#16 above) + \$2,934,636 (#17 above) + \$1,352,460 (#18 above) + \$710,240 (#19 above) + \$2,130,720 (#20 above) + \$1,041,552 (#21 above) + \$956,000 (#22 above) + \$1,041,552 (#23 above) + \$942,320 (#24 above) + \$3,600,000 (#25 above) + \$248,000 (#26 above) + \$1,098,480 (#27 above) + \$314,000 (#28 above) = \$32,436,472 for the first four year period.

Total salary cost for medical professionals for one level II stroke center for annually thereafter - \$204,430 (#1 above) + \$126,046 (#2 above) + \$204,430 (#3 above) + \$126,046 (#4 above) + \$200,339 (#5 above) + \$468,766 (#6 above) + \$181,823 (#7 above) + \$402,539 (#8 above) + \$331,932 (#9 above) + \$61,000 (#10 above) + \$155,095 (#11 above) + \$120,000 (#12 above) + \$734,919 (#13 above) + \$322,665 (#14 above) + \$199,038 (#15 above) + \$177,560 (#16 above) + \$733,659 (#17 above) + \$338,115 (#18 above) + \$177,560 (#19 above) + \$532,680 (#20 above) + \$260,388 (#21 above) + \$239,000 (#22 above) + \$260,388 (#23 above) + \$235,580 (#24 above) + \$900,000 (#25 above) + \$62,000 (#26 above) + \$274,620 (#27 above) + \$78,500 (#28 above) = \$8,109,118 for annually thereafter.

#### **B. Continuing education costs for level I stroke center staff.**

- 1.) Level II core team members of the stroke call roster shall complete a minimum of 8 hours of continuing education in cerebrovascular disease every year – average of \$10.00 per hour for online training X 8 hours = \$80 X one level II stroke center X 4 years = \$320 for the first 4 year period and \$10.00 per hour X 8 hours X one level II stroke center X 1 year = \$80 annually thereafter.

- 2.) Level II core team member of the stroke call roster shall complete a minimum of 8 hours of continuing education in cerebrovascular disease every year – average of \$39.99 annually for online training -  $\$39.99 \times \text{one level II stroke center} \times 4 \text{ years} = \$159.96$  for the first 4 year period and  $\$39.99 \times \text{one level II stroke center} \times 1 \text{ year} = \$39.99$  annually thereafter.
- 3.) Level II stroke call roster member (emergency department physician) shall complete minimum average of 8 hours of continuing education in cerebrovascular disease every year - average of \$10.00 per hour for online training  $\times 8 \text{ hours} \times \text{one level II stroke center} \times 4 \text{ years} = \$320$  for the first 4 year period and  $\$10.00 \text{ per hour} \times 8 \text{ hours} \times \text{one level II stroke center} \times 1 \text{ year} = \$80$  annually thereafter.
- 4.) Level II stroke call roster member (a physician with experience and expertise in diagnosing and treating patients with cerebrovascular disease) shall complete minimum average of 8 hours of continuing education in cerebrovascular disease every year - average of \$10.00 per hour for online training  $\times 8 \text{ hours} \times \text{one level I stroke center} \times 4 \text{ years} = \$320$  for the first 4 year period and  $\$10.00 \times 8 \text{ hours} \times \text{one level II stroke center} \times 1 \text{ year} = \$80$  annually thereafter.
- 5.) Level II stroke call roster member (others as appropriate) shall complete minimum average of 8 hours of continuing education in cerebrovascular disease every year - average of \$10.00 per hour for online training  $\times 8 \text{ hours} \times \text{one level II stroke center} \times 4 \text{ years} = \$320$  annually  $\times 3 \text{ others as appropriate} = \$960$  for the first 4 year period and  $\$10.00 \text{ per hour} \times 8 \text{ hours} \times \text{one level II stroke center} \times 1 \text{ year} = \$80 \times 3 \text{ others as appropriate} = \$240$  annually thereafter.
- 6.) A level II stroke center medical director shall complete a minimum of 8 hours of continuing medical education every year in the area of cerebrovascular disease - average of \$10.00 per hour for online training  $\times 8 \text{ hours} \times \text{one level II stroke center} \times 4 \text{ years} = \$320$  for the first 4 year period and  $\$10.00 \times 8 \text{ hours} \times \text{one level II stroke center} \times 1 \text{ year} = \$80$  annually thereafter.
- 7.) A level II program manager/coordinator shall complete a minimum of 8 hours of continuing education every year in cerebrovascular disease - average of \$39.99 annually for online training =  $\$39.99 \times \text{one level II stroke center} \times 4 \text{ years} = \$159.96$  for the first 4 year period and  $\$39.99 \times \text{one level II stroke center} \times 1 \text{ year} = \$39.99$  annually thereafter.
- 8.) Emergency department physicians in level II stroke centers shall complete a minimum average of 4 hours of continuing medical education in cerebrovascular disease every year - average of \$10.00 per hour for online training  $\times 3 \text{ physicians in the emergency room} \times 4 \text{ hours} \times \text{one level II stroke center} \times 4 \text{ years} = \$480$  for the first 4 year period and  $\$10.00 \times 3 \text{ physicians} \times 4 \text{ hours} \times \text{one level II stroke center} \times 1 \text{ year} = \$120$  annually thereafter.

- 9.) Registered nurses assigned to the emergency departments in level II stroke centers shall complete a minimum of 4 hours of continuing education in the area of cerebrovascular disease every year - average of \$39.99 annually for online training =  $\$39.99 \times 5$  registered nurses in the emergency room  $\times$  one level II stroke center  $\times 4$  years = \$799.80 for the first 4 year period and  $\$39.99 \times 5$  registered nurses in the emergency room  $\times$  one level II stroke center  $\times 1$  year = \$199.95 annually thereafter.
- 10.) Registered nurses assigned to the intensive care unit in level II stroke centers who care for stroke patients shall complete a minimum of 8 hours of continuing education in the area of cerebrovascular disease every year - average of \$39.99 annually for online training  $\times 4$  registered nurses in the intensive care unit  $\times$  one level II stroke center  $\times 4$  years = \$639.84 for the first 4 year period and  $\$39.99$  annually  $\times 4$  registered nurses in the intensive care unit  $\times$  one level II stroke center  $\times 1$  year = \$159.96 annually thereafter.
- 11.) Stroke unit registered nurses in level II stroke centers shall complete a minimum of 8 hours of continuing education in the area of cerebrovascular disease every year - average of \$39.99 annually  $\times 4$  stroke unit registered nurses  $\times$  one level II stroke center  $\times 4$  years = \$639.84 for the first 4 year period and  $\$39.99 \times 4$  registered nurses  $\times$  one level II stroke center  $\times 1$  year = \$159.96 annually thereafter.

Total costs for continuing education for one level II stroke center for the first 4 year period - \$320 (#1 above) + \$159.96 (#2 above) + \$320 (#3 above) + \$320 (#4 above) + \$960 (#5 above) + \$320 (#6 above) + \$159.96 (#7 above) + \$480 (#8 above) + \$799.80 (#9 above) + \$639.84 (#10 above) + \$639.84 (#11 above) = \$5,119.40 for the first 4 year period.

Total costs for continuing education for one level II stroke center for annually thereafter - \$80 (#1 above) + \$39.99 (#2 above) + \$80 (#3 above) + \$80 (#4 above) + \$240 (#5 above) + \$80 (#6 above) + \$39.99 (#7 above) + \$120 (#8 above) + \$199.95 (#9 above) + \$159.96 (#10 above) + \$159.96 (#11 above) = \$1,279.85 for annually thereafter.

### C. Medical Equipment.

- 1) Electronic communication devices for stroke call roster members- 2 electronic communication devices (cell phone and beeper/pager)  $\times$  \$300 for the annual cost of each electronic communication device  $\times 2$  stroke call roster members (one member on call and one back-up member on call) carrying this device  $\times 4$  years  $\times$  one level II stroke center = \$4,800 for the first 4 year period and 2 electronic communication devices (cell phone and beeper/pager)  $\times$  \$300 for the annual cost of each electronic communication device  $\times 2$  stroke call roster members carrying this device (one member on call and one

back-up member) X one level II stroke center X 1 year = \$1,200 annually thereafter.

**2) Resuscitation equipment for the emergency department -**

- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level II stroke center X 4 years = \$2,400 for the first 4 year period and at least 2 X \$300 each = \$600 X one level II stroke center X 1 year = \$600 annually thereafter.
- b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 1 year = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 1 year = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level II stroke center X 1 year (the first year) = \$490 + \$150 annual upkeep and maintenance of air outlets X one level II stroke center X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level II stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1050 X one level II stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) for a total of \$102,040 for the first 4 year period and (air outlet \$150 annual upkeep and maintenance of air outlets X one level II stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level II stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1050 X one level II stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients X one level II stroke center X 1 year = \$200) for a total of \$25,425 annually thereafter.
- e) Mechanical ventilator - \$7000 X one level II stroke center X 1 year (the first year) = \$7000 for the first year + \$1,500 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$11,500 for the first 4

- year period and \$1,500 for the annual upkeep and maintenance X one level II stroke center X 1 year = \$1,500 annually thereafter.
- f) Suction devices - suction device canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$50 X 500 patients X one level II stroke center X 1 year = \$25,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level II stroke center X 1 year (the first year) = \$37,895 for the first year + \$1,500 for the annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 and \$1,500 for the annual upkeep and maintenance X one level II stroke center X 1 year = \$1,500 annually thereafter.
- h) Central line insertion equipment - \$600 X 300 patients = \$180,000 X one level II stroke center X 4 years = \$720,000 for the first 4 year period and \$600 X 300 patients = \$180,000 X one level II stroke center X 1 year = \$180,000 annually thereafter.
- i) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000) + (\$4.00 each for standard intravenous catheters X 500 = \$2,000 X one level II stroke center X 4 years = \$8,000) for a total of \$24,000 for the first 4 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 = \$2,000 X one level II stroke center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- j) Intraosseous devices - needles \$25 each X 300 patients = \$7,500 X one level II stroke center X 4 years = \$30,000 for the first 4 year period and \$25 each X 300 patients = \$7,500 X one level II stroke center X 1 year = \$7,500 annually thereafter.
- k) Drugs necessary for emergency care - saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level II stroke center X 4 years = \$200,000 for the first 4 year period and \$100 X 500 patients = \$50,000 X one level II stroke center X 1 year = \$50,000 annually thereafter.
- l) Two-way communication link with emergency medical service vehicles - \$1200 apiece = \$1200 X one level II stroke center X 4 years = \$4,800 for the first 4 year period and \$1200 X one level II stroke center X 1 year = \$1,200 annually thereafter.
- m) End-tidal carbon dioxide monitor - \$3,900 X one level II stroke center X 1 year (the first year) = \$3,900 for the first year + \$1,500 for the annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$8,400 for the first 4 year period and \$1,500 for

annual upkeep and maintenance X one level II stroke center X  
1 year = \$1,500 annually thereafter.

- n) Temperature control devices for patient and resuscitation  
fluids - \$270 pack of 10 (Bair Hugger Therapy) X 30 = \$8,100 X  
one level II stroke center X 4 years = \$32,400 for the first 4 year  
period and \$270 pack of 10 (Bair Hugger Therapy) X 30 = \$8,100 X  
one level II stroke center X 1 year = \$8,100 annually thereafter.
- o) Supplies necessary for emergency care – (IV start packs, IV tubing,  
syringes, gauze alcohol preps, light bulbs, exam gloves, batteries)  
\$50 X 500 patients = \$25,000 X one level II stroke center X 4 years  
= \$100,000 for the first 4 year period and \$25,000 X one level II  
stroke center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II stroke center  
for the emergency department for the first 4 year period - \$2,400  
(letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) +  
\$102,040 (letter d above) + \$11,500 (letter e above) + \$100,000 (letter f  
above) + \$42,395 (letter g above) + \$720,000 (letter h above) + \$24,000  
(letter i above) + \$30,000 (letter j above) + \$200,000 (letter k above) +  
\$4,800 (letter l above) + \$8,400 (letter m above) + \$32,400 (letter n  
above) + \$100,000 (letter o above) = \$1,477,935 for the first 4 year  
period.

Total cost for resuscitation equipment for one level II stroke center  
for the emergency room department for annually thereafter - \$600  
(letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) +  
\$25,425 (letter d above) + \$1,500 (letter e above) + \$25,000 (letter f  
above) + \$1,500 (letter g above) + \$180,000 (letter h above) + \$6,000  
(letter i above) + \$7,500 (letter j above) + \$50,000 (letter k above) +  
\$1,200 (letter l above) + \$1,500 (letter m above) + \$8,100 (letter n  
above) + \$25,000 (letter o above) = \$358,325 for annually thereafter.

- 3) Resuscitation equipment for the intensive care unit -
- a) Airway control and ventilation equipment including  
laryngoscopes, endotracheal tubes, bag-mask resuscitator and a  
mechanical ventilator - (laryngoscopes at least 2 X \$300 each =  
\$600 X one level II stroke center X 4 years = \$2,400 for the first 4  
year period) + (endotracheal tubes of all sizes \$250 for a pack of 10  
X 50 packs = \$12,500 X one level II stroke center X 4 years =  
\$50,000 for the first 4 year period) + (bag-mask resuscitator \$250  
for a pack of 10 X 50 packs = \$12,500 X one level II stroke center  
X 4 years = \$50,000 for the first 4 year period) + (mechanical  
ventilator \$7000 X one level II stroke center X 1 year (the first  
year) = \$7,000 + \$1,500 for annual upkeep and maintenance of the  
mechanical ventilator X one level II stroke center X 3 years (years  
2 through 4) = \$4,500 for a total of 11,500 for the first 4 year  
period) for a total of \$113,900 for the first 4 year period and  
(laryngoscopes at least 2 X \$300 each = \$600 X one level II stroke  
center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for  
a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 1

year = \$12,500) + (bag-mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 1 year = \$12,500) + (annual upkeep and maintenance of the mechanical ventilator \$1,500 X one level II stroke center X 1 year = \$1,500) for a total of \$27,100 annually thereafter.

- b) Oxygen source with concentration controls - (air outlet \$70 X 7 = \$490 X one level II stroke center X 1 year (the first year) = \$490 + \$150 for upkeep and maintenance of air outlets X one level II stroke center X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator \$35 X 25 = \$875 X one level II stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level II stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) for a total of \$102,040 for the first 4 year period and (air outlet \$70 X 7 = \$490 X one level II stroke center X 1 year = \$490) + (regulator \$35 X 25 = \$875 X one level II stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 = \$200 X one level II stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 1 year = \$200) for a total of \$25,765 annually thereafter.
- c) Cardiac emergency cart, including medications - at least 1 cardiac emergency cart \$1,600 X one level II stroke center X 1 year (the first year) = \$1,600 for the first 4 year period + medications and suction devices \$1,000 X one level II stroke center X 4 years = \$4,000 for the first 4 year period for a total of \$5,600 for the first 4 year period and \$1,000 for medications and suction devices X one level II stroke center X 1 year = \$1,000 annually thereafter.
- d) Telemetry, electrocardiograph capability, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X one level II stroke center X 4 years = \$1,600,000 for the first 4 year period) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X one level II stroke center X 1 year (the first year) = \$37,895 + \$1,500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for the first 4 year period) for a total of \$1,642,395 for



- the first 4 year period and (telemetry \$800 X 500 patients = \$400,000 X one level II stroke center X 1 year = \$400,000 + (electrocardiograph, cardiac monitor and defibrillator \$1,500 for upkeep and maintenance X one level II stroke center X 1 year = \$1,500) for a total of \$401,500 annually thereafter.
- e) Electronic pressure monitoring and pulse oximetry - (electronic pressure monitoring devices \$100 X 25 = \$2,500 X one level II stroke center X 4 years = \$10,000 for the first 4 year period) + (pulse oximetry devices \$100 X 25 = \$2,500 X one level II stroke center X 4 years = \$10,000 for the first 4 year period) for a total of \$20,000 for the first 4 year period and (electronic pressure monitoring devices \$100 X 25 = \$2,500 X one level II stroke center X 1 year = \$2,500) + (pulse oximetry devices \$100 X 25 = \$2,500 X one level II stroke center X 1 year = \$2,500) for a total of \$5,000 annually thereafter.
- f) End-tidal carbon dioxide monitor - \$3,900 X one level II stroke center X 1 year (the first year) = \$3,900 for the first year + \$500 for the upkeep and maintenance of the end-tidal carbon dioxide monitor X one level II stroke center X 3 years (years 2 through 4) = \$1,500 for a total of \$5,400 for the first 4 year period and \$500 for the upkeep and maintenance of the end-tidal carbon dioxide monitor X one level II stroke center X 1 year = \$500 annually thereafter.
- g) Patient weight devices - \$1000 X one level II stroke center X 1 year (the first year) = \$1000 for the first year + \$250 for the annual upkeep and maintenance of patient weight devices X one level II stroke center X 3 years (years 2 through 4) = \$750 for a total of \$1,750 for the first 4 year period and \$250 for the annual upkeep and maintenance of patient weight devices X one level II stroke center X 1 year = \$250 annually thereafter.
- h) Drugs and intravenous fluids - \$200 X 500 patients = \$100,000 X one level II stroke center X 4 years = \$400,000 for the first 4 year period and \$200 X 500 patients X one level II stroke center = \$100,000 annually thereafter.
- i) Intracranial pressure monitoring devices - digital \$13,000 X one level II stroke center X 1 year (the first year) = \$13,000 for the first year + \$1,500 for upkeep and maintenance of intracranial pressure monitoring devices X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$17,500 for the first 4 year period and \$1,500 for upkeep and maintenance of intracranial pressure monitoring devices X one level II stroke center X 1 year = \$1,500 for a total of \$1,500 for annually thereafter.
- j) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$25,000 X one level II stroke center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II stroke center for the intensive care unit for the first 4 year period - \$113,900 (letter a above) + \$102,040 (letter b above) + \$5,600 (letter c above) + \$1,642,395 (letter d above) + \$20,000 (letter e above) + \$5,400 (letter f above) + \$1,750 (letter g above) + \$400,000 (letter h above) + \$17,500 (letter i above) + \$100,000 (letter j above) = \$2,408,585 for the first 4 year period.

Total cost for resuscitation equipment for one level II stroke center for the intensive care unit for annually thereafter - \$27,100 (letter a above) + \$25,765 (letter b above) + \$1,000 (letter c above) + \$401,500 (letter d above) + \$5,000 (letter e above) + \$500 (letter f above) + \$250 (letter g above) + \$100,000 (letter h above) + \$1,500 (letter i above) + \$25,000 (letter j above) = \$587,615 for annually thereafter.

4) Stroke center stroke unit resuscitation equipment-

- a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes - (laryngoscopes at least 2 X \$300 each = \$600 X one level II stroke center X 4 years = \$2,400 for the first 4 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period) + (mechanical ventilator \$7000 X one level II stroke center X 1 year (the first year) + \$1,500 for annual upkeep and maintenance of ventilator X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$11,500 for the first 4 year period) for a total of \$63,900 for the first 4 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level II stroke center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II stroke center X 1 year = \$12,500) + (mechanical ventilator \$1,500 annual upkeep, maintenance and repair X one level II stroke center X 1 year = \$1,500) for a total of \$14,600 annually thereafter.
- b) Bag-mask resuscitator and sources of oxygen - (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period) + (air outlet \$70 X 7 = \$490 X one level II stroke center X 1 year (the first year) + \$150 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level II stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level II stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tanks \$70 X 300 = \$21,000 X one

level II stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) for a total of \$152,040 for the first 4 year period and (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 1 year = \$12,500) + (air outlet \$150 for annual upkeep and maintenance X one level II stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level II stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 1 year = \$200) for a total of \$37,925 annually thereafter.

- c) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$25,000 X one level II stroke center X 1 year = \$25,000 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X one level II stroke center X 4 years = \$1,600,000 for the first 4 year period) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X one level II stroke center X 1 year (the first year) + \$1,500 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$42,395 for the first 4 year period) for a total of \$1,642,395 for the first 4 year period and (telemetry \$800 X 500 patients = \$400,000 X one level II stroke center X 1 year = \$400,000) + (\$1,500 for annual upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level II stroke center X 1 year = \$1,500) for a total of \$401,500 annually thereafter.
- e) All standard intravenous fluids and administration devices and intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period) for a total of \$24,000 for the first 4 year period (\$4.00 each for standard intravenous fluids

X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.

- f) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 100 patients = \$10,000 X one level II stroke center X 4 years = \$40,000 for the first 4 year period and \$10,000 X one level II stroke center X 1 year = \$10,000 annually thereafter.
- g) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$25,000 X one level II stroke center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II stroke center stroke unit for the first 4 year period - \$63,900 (letter a above) + \$152,040 (letter b above) + \$100,000 (letter c above) + \$1,642,395 (letter d above) + \$24,000 (letter e above) + \$40,000 (letter f above) + \$100,000 (letter g above) = \$2,122,335 for the first 4 year period.

Total cost for resuscitation equipment for one level II stroke center stroke unit for annually thereafter - \$14,600 (letter a above) + \$37,925 (letter b above) + \$25,000 (letter c above) + \$401,500 (letter d above) + \$6,000 (letter e above) + \$10,000 (letter f above) + \$25,000 (letter g above) = \$520,025 for annually thereafter.

- 5) Angiography with interventional capability available 24 hours a day, 7 days a week, in-house computerized tomography, computerized tomography perfusion, computerized tomography angiography - \$1,000,000 average for CT machine with these capabilities = \$1,000,000 X one level II stroke center X 1 year (the first year) = \$1,000,000 for the first year + \$200,000 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$600,000 for a total of \$1,600,000 for the first 4 year period and \$200,000 for annual upkeep and maintenance X one level II stroke center X 1 year = \$200,000 annually thereafter.
- 6) Magnetic resonance imaging, magnetic resonance angiogram/magnetic resonance venography - average cost \$2,000,000 for MRI machine with these capabilities = \$2,000,000 X one level II stroke center X 1 year (the first year) = \$2,000,000 for the first year) + \$400,000 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$1,200,000 for a total of \$3,200,000 for the first 4 year period and \$400,000 for annual upkeep

and maintenance X one level II stroke center X 1 year = \$400,000 annually thereafter.

- 7) Extra cranial ultrasound, trans thoracic echo and trans esophageal echo-average \$35,000 for ultrasound machine = \$35,000 X one level II stroke center X 1 year (the first year) = \$35,000 for the first year + \$2,000 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$6,000 = for a total of \$41,000 for the first 4 year period and \$2,000 for annual upkeep and maintenance X one level II stroke center X 1 year = \$2,000 annually thereafter.
- 8) Resuscitation equipment for the radiology department-
- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level II stroke center X 4 years = \$2,400 for the first 4 year period and at least 2 X \$300 each = \$600 X one level II stroke center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 X one level II stroke center X 1 year = \$12,500 annually thereafter.
  - c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 packs X one level II stroke center X 1 year = \$12,500 annually thereafter.
  - d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level II stroke center X 1 year (the first year) = \$490 for the first year + \$150 annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level II stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level II stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) for a total of \$102,040 for the first 4 year period and (air outlet \$70 X 7 = \$490 X one level II stroke center X 1 year = \$490) + (regulator for air outlet \$35 X 25 = \$875 X one level II stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II stroke

center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 1 year = \$200) for a total of \$25,765 for annually thereafter.

- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$50 X 500 X one level II stroke center X 1 year = \$25,000 annually thereafter.
- f) Telemetry - average of \$800 X 500 patients = \$400,000 X one level II stroke center X 4 years = \$1,600,000 for the first 4 year period and \$800 X 500 patients X one level II stroke center X 1 year = \$400,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level II stroke center = \$37,895 X one level II stroke center X 1 year (first year) = \$37,895 for the first year + \$1,500 for the annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for the first 4 year period and \$1,500 for the annual upkeep and maintenance X one level II stroke center X 1 year = \$1,500 for annually thereafter.
- h) All standard administration devices - \$4.00 each X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period and \$2,000 X one level II stroke center X 1 year = \$2,000 annually thereafter.
- i) All standard intravenous catheters - \$4.00 each X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period and \$2,000 X one level II stroke center X 1 year = \$2,000 annually thereafter.
- j) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level II stroke center X 4 years = \$200,000 for the first 4 year period and \$50,000 X one level II stroke center X 1 year = \$50,000 annually thereafter.
- k) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$25,000 X one level II stroke center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II stroke center for the radiology department for the first 4 year period - \$2,400 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$102,040 (letter d above) + \$100,000 (letter e above) + \$1,600,000 (letter f above) + \$42,395 (letter g above) + \$8,000 (letter h above) + \$8,000 (letter i above) + \$200,000 (letter j above) + \$100,000 (letter k above) = \$2,262,835 for the first 4 year period.

Total cost for resuscitation equipment for one level II stroke center for the radiology department for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,765 (letter d above) + \$25,000 (letter e above) + \$400,000 (letter f above) + \$1,500 (letter g above) + \$2,000 (letter h above) + \$2,000 (letter i above) + \$50,000 (letter j above) + \$25,000 (letter k above) = \$556,865 for annually thereafter.

- 9) Operating rooms shall have at least the following equipment:
- a) Operating microscope - \$15,000 X one level II stroke center X 1 year (first year) = \$15,000 for the first year + \$1,500 for annual upkeep and maintenance X one level II stroke center X 4 years (years two through four) = \$6,000 for a total of \$21,000 for the first 4 year period and \$1,500 for annual upkeep and maintenance X one level II stroke center X 1 year = \$1,500 annually thereafter.
  - b) Thermal control equipment for patient and resuscitation fluids - (temperature control devices \$2,750 each X 2 = \$5,500 X one level II stroke center X 1 year (the first year) = \$5,500 for the first year + \$2,750 X 1 = \$2,750 for replacement X 3 years X one level II stroke center = \$8,250 for a total of \$13,750 for the first 4 year period) + (blankets \$270 pack of 10 X 50 = \$13,500 X one level II stroke center X 4 years = \$54,000 for the first 4 year period) + (resuscitation fluids \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period) for a total of \$167,750 for the first 4 year period and (temperature control devices \$2,750 each X 1 = \$2,750 for replacement X one level II stroke center X 1 year = \$2,750) + (blankets \$270 pack of 10 X 50 = \$13,500 X one level II stroke center X one year = \$13,500) + (resuscitation fluids \$50 X 500 patients = \$25,000 X one level II stroke center X 1 year) = \$25,000) for a total of \$41,250 for annually thereafter.
  - c) Instruments necessary to perform an open craniotomy - \$1,500 X one level II stroke center X 4 years = \$6,000 for the first 4 year period and \$1500 X one level II stroke center X 1 year = \$1,500 annually thereafter.
  - d) Monitoring equipment - \$4,000 X one level II stroke center X 1 year (the first year) = \$4,000 for the first year + \$500 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$1,500 for a total of \$5,500 for the first 4 year period and \$500 for annual upkeep and maintenance X one level II stroke center X 1 year = \$500 annually thereafter.

Total cost for operating room equipment for one level II stroke center for the first 4 year period - \$21,000 (letter a above) + \$167,750 (letter b above) + \$6,000 (letter c above) + \$5,500 (letter d above) = \$200,250 for the first four year period.

Total cost for operating room equipment for one level II stroke center for annually thereafter - \$1,500 (letter a above) + \$41,250 (letter b

above) + \$1,500 (letter c above) + \$500 (letter d above) = \$44,750 for annually thereafter.

**10) Resuscitation equipment available to the operating room -**

- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level II stroke center X 4 years = \$2,400 for the first 4 year period and \$600 X one level II stroke center X 1 year = \$600 annually thereafter.
- b) Endotracheal tubes of all sizes - 250 for a pack of 10 X 50 = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period and \$12,500 X one level II stroke center X 1 year = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period and \$12,500 X one level II stroke center X 1 year = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level II stroke center X 1 year (the first year) = \$490 for the first year + air outlet annual upkeep and maintenance \$150 X one level II stroke center X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level II stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level II stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) for a total of \$102,040 for the first 4 year period and (air outlet annual upkeep and maintenance \$150 X one level II stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level II stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 1 year = \$200) for a total of \$25,425 annually thereafter.
- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period



- and \$25,000 X one level II stroke center X 1 year = \$25,000 annually thereafter.
- f) Telemetry- average of \$800 X 500 patients = \$400,000 X one level II stroke center X 4 years = \$1,600,000 for the first 4 year period and \$400,000 X one level II stroke center X 1 year = \$400,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level II stroke center X 1 year (the first year) = \$37,895 + \$1,500 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for the first 4 year period and \$1,500 for the annual upkeep and maintenance X one level II stroke center X 1 year = \$1,500 annually thereafter.
- h) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period) for a total of \$24,000 for the first 4 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- i) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level II stroke center X 4 years = \$200,000 for the first 4 year period and \$100 X 500 patients X one level II stroke center X 1 year = \$50,000 annually thereafter.
- j) Supplies necessary for emergency care (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$50 X 500 patients = \$25,000 X one level II stroke center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II stroke center operating room for the first 4 year period - \$2,400 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$102,040 (letter d above) + \$100,000 (letter e above) + \$1,600,000 (letter f above) + \$42,395 (letter g above) + \$24,000 (letter h above) + \$200,000 (letter i

above) + \$100,000 (letter j above) = \$2,270,835 for the first four year period.

Total cost for resuscitation equipment for one level II stroke center operating room annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,425 (letter d above) + \$25,000 (letter e above) + \$400,000 (letter f above) + \$1,500 (letter g above) + \$6,000 (letter h above) + \$50,000 (letter i above) + \$25,000 (letter j above) = \$558,525 for annually thereafter.

**11) Resuscitation equipment for the post-anesthesia recovery room (PAR)-**

- a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes, bag-mask resuscitator, sources of oxygen and a mechanical ventilator- (laryngoscopes at least 2 X \$300 each = \$600 X one level II stroke center X 4 years = \$2,400 for the first 4 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period) + (bag-mask resuscitator \$250 for a pack of 10 X 50 = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period) + (mechanical ventilator \$7000 X one level II stroke center X 1 year (the first year) = \$7,000 + \$1,500 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$11,500 for the first 4 year period) + (air outlet \$70 X 7 = \$490 X one level II stroke center X 1 year (the first year) = \$490 + \$150 for annual upkeep and maintenance X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator \$35 X 25 = \$875 X one level II stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 patients = \$1,050 X one level II stroke center X 4 years = \$4,200) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 4 years = \$800) for a total of \$215,940 for the first 4 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level II stroke center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II stroke center X 1 year = \$12,500) + (bag-mask resuscitator \$250 for a pack of 10 X 50 = \$12,500 X one level II stroke center X 1 year = \$12,500) + (mechanical ventilator \$1,500 for annual upkeep and maintenance X one level II stroke center X 1 year = \$1,500) + (air outlet \$150

- for annual upkeep and maintenance X one level II stroke center X 1 year = \$150) + (regulator \$35 X 25 = \$875 X one level II stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 patients = \$1,050 X one level II stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 1 year = \$200) for a total of \$52,525 annually thereafter.
- b) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$50 X 500 patients X one level II stroke center X one year = \$25,000 annually thereafter.
- c) Telemetry, electrocardiograph capability, cardiac monitor and defibrillator - (telemetry average \$800 X 500 patients = \$400,000 X one level II stroke center X 4 years = \$1,600,000 for the first 4 year period) + (electrocardiograph, cardiac monitor and defibrillator \$37,895 X one level II stroke center X 1 year (the first year) = \$37,895 for the first year) + (\$1,500 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for electrocardiograph, cardiac monitor and defibrillator for a total of \$1,642,395 for the first 4 year period and \$1,500 for annual upkeep and maintenance X one level II stroke center X 1 year = \$1,500 annually thereafter.
- d) All standard intravenous fluids and administration devices, including intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard administration devices X 500 patients X one level II stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period) for a total of \$24,000 for the first 4 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients X one level II stroke center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- e) Drugs necessary for emergency care- saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level II stroke center X 4 years = \$200,000 for the first 4 year period and \$50,000 X one level II stroke center X 1 year = \$50,000 annually thereafter.
- f) Supplies necessary for emergency care – (IV start packs, IV tubing,

syringes, gauze alcohol preps, light bulbs, exam gloves, batteries)  
 $\$50 \times 500 \text{ patients} = \$25,000 \times \text{one level II stroke center} \times 4 \text{ years}$   
 $= \$100,000$  for the first 4 year period and  $\$25,000 \times \text{one level II}$   
 $\text{stroke center} \times 1 \text{ year} = \$25,000$  annually thereafter.

Total cost for resuscitation equipment for one level II stroke center for the post-anesthesia recovery room (PAR) for the first 4 year period -  $\$215,940$  (letter a above) +  $\$100,000$  (letter b above) +  $\$1,642,395$  (letter c above) +  $\$24,000$  (letter d above) +  $\$200,000$  (letter e above) +  $\$100,000$  (letter f above) =  $\$2,282,335$  for the first 4 year period.

Total cost for resuscitation equipment for one level II stroke center for the post-anesthesia recovery room (PAR) for annually thereafter -  $\$55,525$  (letter a above) +  $\$25,000$  (letter b above) +  $\$1,500$  (letter c above) +  $\$6,000$  (letter d above) +  $\$50,000$  (letter e above) +  $\$25,000$  (letter f above) =  $\$163,025$  for annually thereafter.

#### 12) Laboratory Services -

- a) Standard analyses of blood, urine and other body fluids- costs of materials  $\$200 \times 500 \text{ patients} = \$100,000 \times \text{one level II stroke center} \times 4 \text{ years} = \$400,000$  for the first 4 year period and  $\$200 \times 500 \text{ patients} \times \text{one level II stroke center} \times 1 \text{ year} = \$100,000$  annually thereafter.
- b) Blood typing and cross matching - centrifuge  $\$2000 \times \text{one level II stroke center} \times 1 \text{ year}$  (the first year) =  $\$2,000 + \$250$  for the annual upkeep and maintenance of the centrifuge  $\times \text{one level II stroke center} \times 3 \text{ years}$  (years 2 through 4) =  $\$750$  for a total of  $\$2,750$  for the first 4 year period and  $\$250$  for the annual upkeep and maintenance of the centrifuge  $\times \text{one level II stroke center} \times 1 \text{ year} = \$250$  annually thereafter.
- c) Coagulation studies -  $\$200 \text{ materials} \times 250 \text{ patients} = \$50,000 \times \text{one level II stroke center} \times 4 \text{ years} = \$200,000$  for the first 4 year period and  $\$200 \text{ materials} \times 250 \text{ patients} = \$50,000 \times \text{one level II stroke center} \times 1 \text{ year} = \$50,000$  annually thereafter.
- d) Blood bank or access to a community central blood bank and adequate hospital blood storage facilities - at the least blood storage refrigerators 1 large refrigerator/use of community central blood bank at  $\$15,000 \times \text{one level II stroke center} \times 1 \text{ year}$  (the first year) =  $\$15,000 + \$1,500$  for the annual upkeep and maintenance of the blood storage refrigerator  $\times \text{one level II stroke center} \times 3 \text{ years}$  (years 2 through 4) =  $\$4,500$  for a total of  $\$19,500$  for the first 4 year period and  $\$1,500$  for the annual upkeep and maintenance of the blood storage refrigerator  $\times \text{one level II stroke center} \times 1 \text{ year} = \$1,500$  annually thereafter.
- e) Blood gases and pH determinations - at least one blood gas analyzer and kit  $\$3000 \times \text{one level II stroke center} \times 4 \text{ years} = \$12,000$  for the first 4 year period and  $\$3,000 \times \text{one level II stroke}$

center X 1 year = \$3,000 annually thereafter.

f) Blood chemistries - test and kits average of \$350 X 100 patients = \$35,000 X one level II stroke center X 4 years = \$140,000 for the first 4 year period and \$350 X 100 patients X one level II stroke center X 1 year = \$35,000 annually thereafter.

Total costs for laboratory services for one level II stroke center for the first 4 year period - \$400,000 (letter a above) + \$ 2,750 (letter b above) + \$200,000 (letter c above) + \$19,500 (letter d above) + \$12,000 (letter e above) + \$140,000 (letter f above) = \$774,250 for the first year.

Total cost for laboratory services for one level II stroke center for annually thereafter - \$100,000 (letter a above) + \$250 (letter b above) + \$50,000 (letter c above) + \$1,500 (letter d above) + \$3,000 (letter e above) + \$35,000 (letter f above) = \$189,750 for annually thereafter.

Total cost for medical equipment for the first 4 year period - \$4,800 (number 1 above) + \$1,477,935 (number 2 above) + \$2,408,585 (number 3 above) + \$2,122,335 (number 4 above) + \$1,600,000 (number 5 above) + \$3,200,000 (number 6 above) + \$41,000 (number 7 above) + \$2,262,835 (number 8 above) + \$200,250 (number 9 above) + \$2,270,835 (number 10 above) + \$2,282,335 (number 11 above) + \$774,250 (number 12 above) = \$18,645,160 for the first 4 year period.

Total cost for medical equipment for annually thereafter - \$1,200 (number 1 above) + \$358,325 (number 2 above) + \$587,615 (number 3 above) + \$520,025 (number 4 above) + \$200,000 (number 5 above) + \$400,000 (number 6 above) + \$2,000 (number 7 above) + \$556,865 (number 8 above) + \$44,750 (number 9 above) + \$558,525 (number 10 above) + \$163,025 (number 11 above) + \$189,750 (number 12 above) = \$3,582,080 for annually thereafter.

D. The stroke center shall have support services to assist the patient's family from time of entry into the facility to time of discharge - at least 1 full time equivalent medical social worker \$66,000 annually X one level II stroke center X 4 years = \$264,000 for the first 4 year period and \$66,000 X one level II stroke center X 1 year = \$66,000 annually thereafter.

E. The stroke center shall have a stroke rehabilitation program or plan to refer those stroke patients that require rehabilitation to another facility or community agency that can provide necessary services - (at least 1 physical therapist \$74,075 annually X one level II stroke center X 4 years = \$296,300 for the first 4 year period) + (occupational therapist \$72,763 annually X one level II stroke center X 4 years = \$291,052 for the first 4 year period) + (speech therapist/pathologist \$67,834 annually X one level II stroke center X 4 years = \$271,336 for the first 4 year period) for a total of \$858,688 for the first 4 year period and \$74,075 + \$72,763 + \$67,834 = \$214,672 X one level II stroke center X 1 year = \$214,672 annually thereafter.

**F. Courses/conferences for physicians who are not board certified.**

- 1) National or international stroke course registration (\$1,200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level II stroke center X 4 years = \$0 for the first 4 year period and \$2,950 X no level II stroke center X 1 year = \$0 annually thereafter.
- 2) Regional stroke course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level II stroke center X 2 (1 conference every 2 years) = \$3,500 for the first 4 year period and \$1,750 X one level II stroke center X 1 year = \$1,750 annually thereafter.
- 3) State stroke course or conference - (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level II stroke center X 4 years = \$0 for the first 4 year period and \$1,150 X no level II stroke center X 1 year = \$0 annually thereafter.

**G. Courses/conferences for program manager**

- 1) National or international stroke course or conference - (\$1200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level II stroke center X 4 years = \$0 for the first 4 year period and \$2,950 X no level II stroke center X 1 year = \$0 annually thereafter.
- 2) Regional stroke course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level II stroke center X 2 (1 conference every 2 years) = \$3,500 for the first 4 year period and \$1,750 X one level II stroke center X 1 year = \$1,750 annually thereafter.
- 3) State stroke course or conference - (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level II stroke center X 4 years = \$0 for the first 4 year period and \$1,150 X no level II stroke center X 1 year = \$0 annually thereafter.

**H. Stroke registry -**

- 1) Computer with internet capability/access \$600 computer + internet fee \$100/month \$1,200 annually X one level II stroke center X 4 years = \$7,200 for the first 4 year period and \$1,800 X one level II stroke center X 1 year = \$1,800 annually thereafter.
- 2) Patient registrar - \$36,258 annually X one level II stroke center X 4 years = \$145,032 for the first 4 year period and \$36,258 X one level II stroke center X 1 year = \$36,258 annually thereafter.
- 3) Training to set up stroke registry system/program for data entry - \$200 annually X one level II stroke center X 4 years = \$800 for the first 4 year period and \$200 X one level II stroke center X 1 year = \$200 annually thereafter.

- I. Public education program to promote stroke prevention and stroke symptoms awareness - e.g. community health fairs costs of printing and advertisement costs (posters, brochures etc...) \$350 for each health fair x 12 health fairs annually = \$4200 annually X one level II stroke center X 4 years = \$16,800 for the first 4 year period and \$4,200 X one level II stroke center X 1 year = \$4,200 annually thereafter.
- J. Patient education program to promote stroke prevention and stroke symptoms awareness - printing costs of brochures etc... \$500 annually X one level II stroke center X 4 years = \$2,000 for the first 4 year period and \$500 X one level II stroke center X one year = \$500 annually thereafter.
- K. Professional education outreach program in catchment areas to provide training and other supports to improve care of stroke patients - e.g. hospitals sponsor at least 1 conference per year within their service area at the cost of \$2000 annually X one level II stroke center X 4 years = \$8,000 for the first 4 year period and \$2,000 X one level II stroke center X 1 year = \$2,000 annually thereafter.
- L. Stroke centers shall be actively involved in local and regional EMS systems by providing training and clinical educational resources - hospitals sponsor at least one conference per year within their area for EMS at the cost of \$2,000 annually X one level II stroke center X 4 years = \$8,000 for the first 4 year period and \$2,000 X one level II stroke center X 1 year = \$2,000 annually thereafter.
- M. A lighted designated helicopter landing area at the stroke center to accommodate incoming medical helicopters which shall be cordoned off at all times from the general public. The stroke center shall also have a landing area on the hospital premises no more than three (3) minutes from the emergency room - (construction of helipad estimate of \$36,000 X 1 helipad X one level II stroke center X 1 year (the first year) = \$36,000) + (maintenance and upkeep of helipad \$2,000 X 3 years (years 2 through 4) X one level II stroke center = \$6,000) for a total of \$42,000 for the first 4 year period for the helipad + (cordoning barrier \$4,300 X 1 year (the first year) X one level II stroke center = \$4,300) + \$500 for maintenance and upkeep of the cordoning barrier X 3 years (years 2 through 4) X one level II stroke center = \$1,500) for a total of \$5,800 for the first 4 year period for the cordoning barrier for a total of \$47,800 for the first 4 year period and \$2,000 for maintenance and upkeep of helipad + \$500 for maintenance and upkeep of the cordoning barrier = \$2,500 X 1 year X one level II stroke center = \$2,500 annually thereafter.

Total cost for one level II stroke center for the first 4 year period -  
[\$32,436,472 letter A] + [\$5,119.40 letter B] + [\$18,645,160 letter C] + [\$264,000 letter D] + [\$858,688 letter E] + [\$3,500 letter F] +  
[\$3,500 letter G] + [\$153,032 letter H] + [\$16,800 letter I] +

$[\$2,000 \text{ letter J}] + [\$8,000 \text{ letter K}] + [\$8,000 \text{ letter L}] + [\$47,800 \text{ letter M}] = \$52,452,071$  for the first 4 year period.

Total cost for one level II stroke center for annually thereafter -  
 $[\$8,109,118 \text{ letter A}] + [\$1,279.85 \text{ letter B}] + [\$3,582,080 \text{ letter C}] +$   
 $[\$66,000 \text{ letter D}] + [\$214,672 \text{ letter E}] + [\$1,750 \text{ letter F}] + [\$1,750$   
 $\text{letter G}] + [\$38,258 \text{ letter H}] + [\$4,200 \text{ letter I}] + [\$500 \text{ letter J}] +$   
 $[\$2,000 \text{ letter K}] + [\$2,000 \text{ letter L}] + [\$2,500 \text{ letter M}] =$   
 $\$12,026,107$  for annually thereafter.

It is expected that one level II stroke center will be designated during the first 4 year period (\$52,452,071) and that same level II stroke center will be designated again at some time (4 year intervals) annually thereafter (\$12,026,107).

### 3. Level III Stroke Center.

#### A. Medical Professionals.

- 1) A physician experienced in diagnosing and treating cerebrovascular diseases - \$204,430 annually X 4 years X one level III stroke center = \$817,720 for the first 4 year period and \$204,430 annually X one level III stroke center X 1 year = \$204,430 annually thereafter.
- 2) At least one other healthcare professional or qualified individual credentialed in stroke patient care - \$126,046 annually X 4 years X one level III stroke center = \$504,184 for the first 4 year period and \$126,046 X one level III stroke center X 1 year = \$126,046 annually thereafter.
- 3) Stroke center medical director who is recommended to be a board certified or board admissible physician - \$204,430 annually X 4 years X one level III stroke center = \$817,720 for the first 4 year period and \$204,430 annually X one level III stroke center X 1 year = \$204,430 annually thereafter.
- 4) Stroke program manager/coordinator who is a registered nurse or qualified individual - \$126,046 annually X 4 years X one level III stroke center = \$504,184 for the first 4 year period and \$126,046 annually X one level III stroke center X 1 year = \$126,046 annually thereafter.
- 5) An internal medicine physician - \$181,823 annually X 4 years X one level III stroke center = \$727,292 for the first 4 year period and \$181,823 annually X one level III stroke center X 1 year = \$181,823 annually thereafter.
- 6) A diagnostic radiologist - \$402,539 annually X 4 years X one level III stroke center = \$1,610,156 for the first 4 year period and \$402,539 annually X one level III stroke center X 1 year = \$402,539 annually thereafter.
- 7) Medical director of the emergency department who is recommended to be a board certified or board-admissible physician - \$199,038 annually X 4 years X one level III stroke center = \$796,152 for the



- first 4 year period and \$199,038 X one level III stroke center X 1 year = \$199,038 annually thereafter.
- 8) Registered nurses in the emergency department - \$64,533 annually X 5 registered nurses in the emergency department X 4 years X one level III stroke center = \$1,290,660 for the first 4 year period and \$64,533 annually X 5 registered nurses in the emergency department X one level III stroke center X 1 year = \$322,665 annually thereafter.
  - 9) Emergency department physician credentialed for stroke care by the stroke center 24 hours a day, 7 days a week - \$244,973 annually X 3 emergency department physicians X 4 years X one level III stroke center = \$2,939,676 for the first 4 year period and \$244,973 annually X 3 emergency department physicians X one level III stroke center X 1 year = \$734,919 annually thereafter.
  - 10) Stroke unit medical director - \$177,560 annually X 4 years X one level III stroke center = \$710,240 for the first 4 year period and \$177,560 annually X one level III stroke center X 1 year = \$177,560 annually thereafter.
  - 11) Physician on duty or available 24 hours a day, 7 days a week in the stroke center stroke unit - \$177,560 annually X 3 physicians in the stroke center stroke unit X 4 years X one level III stroke center = \$2,130,720 for the first 4 year period and \$177,560 annually X 3 physicians in the stroke center stroke unit X one level III stroke center X 1 year = \$532,680 annually thereafter.
  - 12) Stroke center stroke unit shall have registered nurses and other essential personnel on duty 24 hours a day 7 days a week - \$65,097 annually for the registered nurse X 4 registered nurses in the stroke center stroke unit X 4 years X one level III stroke center = \$1,041,552 for the first 4 year period and \$65,097 annually for the registered nurse X 4 registered nurses in the stroke center stroke unit X one level III stroke center X 1 year = \$260,388 annually thereafter.
  - 13) Computerized tomography technologist - \$58,895 annually X 4 computerized tomography technologists X 4 years X one level III stroke center = \$942,320 for the first 4 year period and \$58,895 annually X 4 computerized tomography technologists X one level III stroke center X 1 year = \$235,580 annually thereafter.
  - 14) Neurologist/radiologist - average \$300,000 annually X 3 neurologists/radiologists X 4 years X one level III stroke center = \$3,600,000 for the first 4 year period and \$300,000 annually X 3 neurologists/radiologists X one level III stroke center X 1 year = \$900,000 annually thereafter.
  - 15) Transport nurse/radiology technician - averages \$62,000 annually X 4 years X one level III stroke center = \$248,000 for the first 4 year period and \$62,000 X one level III stroke center X 1 year = \$62,000 annually thereafter.

Total salary cost for medical professionals for one level III stroke center for the first 4 year period - \$817,720 (#1 above) + \$504,184 (#2 above) + \$817,720 (#3 above) + \$504,184 (#4 above) + \$727,292 (#5 above) + \$1,610,156 (#6 above) + \$796,152 (#7 above) + \$1,290,660 (#8 above) + \$2,939,676 (#9 above) + \$710,240 (#10 above) + \$2,130,720

(#11 above) + \$1,041,552 (#12 above) + \$942,320 (#13 above) + \$3,600,000 (#14 above) + \$248,000 (#15 above) = \$18,680,576 for the first 4 year period.

Total salary cost for medical professionals for one level III stroke center for annually thereafter - \$204,430 (#1 above) + \$126,046 (#2 above) + \$204,430 (#3 above) + \$126,046 (#4 above) + \$181,823 (#5 above) + \$402,539 (#6 above) + \$199,038 (#7 above) + \$322,665 (#8 above) + \$734,919 (#9 above) + \$177,560 (#10 above) + \$532,680 (#11 above) + \$260,388 (#12 above) + \$235,580 (#13 above) + \$900,000 (#14 above) + \$62,000 (#15 above) = \$4,670,144 for annually thereafter.

**B. Continuing education for level III stroke center staff.**

- 1) Level III stroke call roster member (emergency department physician) shall complete a minimum average of 8 hours of continuing education in cerebrovascular disease every 2 years - average of \$10.00 per hour for online training X 4 hours X 4 years X one level III stroke center = \$160 for the first 4 year period and \$10 X 4 hours X one level III stroke center X 1 year = \$40 annually thereafter.
- 2) Level III stroke call roster member (others as appropriate) shall complete a minimum average of 8 hours of continuing education in cerebrovascular disease every 2 years - average of \$10.00 per hour for online training X 4 hours X 4 years X one level III stroke center = \$160 for the first 4 year period and \$10 per hour for online training X 4 hours X one level III stroke center X 1 year = \$40 annually thereafter.
- 3) A level III stroke center medical director shall complete a minimum of 8 hours of continuing medical education every 2 years in the area of cerebrovascular disease - average of \$10.00 per hour for online training X 4 hours X 4 years X one level III stroke center = \$160 for the first 4 year period and \$10 per hour for online training X 4 hours X one level III stroke center X 1 year = \$40 annually thereafter.
- 4) A level III program manager/coordinator shall complete a minimum of 8 hours of continuing education every 2 years in cerebrovascular disease - average of \$39.99 annually for online training X 4 years X one level III stroke center = \$159.96 for the first 4 year period and \$39.99 X one level III stroke center X 1 year = \$39.99 annually thereafter.
- 5) Emergency department physicians in level III stroke centers shall complete a minimum average of 6 hours of continuing medical education in cerebrovascular disease every 2 years - average of \$10.00 per hour for online training X 3 emergency department physicians X 3 hours of continuing medical education X 4 years X one level III stroke center = \$360 for the first 4 year period and \$10.00 per hour for online training X 3 emergency department physicians X 3 hours of continuing medical education X one level III stroke center X 1 year = \$90 annually thereafter.

- 6) Registered nurses assigned to the emergency departments in level III stroke centers shall complete a minimum of 6 hours of continuing education in the area of cerebrovascular disease every 2 years - average of \$39.99 annually for online training X 5 registered nurses in the emergency department X 4 years X one level III stroke center = \$799.80 for the first 4 year period and \$39.99 annually for online training X 5 registered nurses in the emergency department X one level III stroke center X 1 year = \$199.95.
- 7) Registered nurses for level III stroke centers shall maintain core competencies in the care of the stroke patient annually as determined by the stroke center - average for nurse educator/supervisor \$78,500 annually X 4 years X one level III stroke center = \$314,000 for the first 4 year period and \$78,500 X one level III stroke center X 1 year = \$78,500 annually thereafter.

Total cost for continuing education for the first 4 year period - \$160 (#1 above) + 160 (#2 above) + \$160 (#3 above) + \$159.96 (#4 above) + \$360 (#5 above) + \$799.80 (#6 above) + \$314,000 (#7 above) = \$315,799.76 for the first 4 year period.

Total cost for continuing education for annually thereafter - \$40 (#1 above) + \$40 (#2 above) + \$40 (#3 above) + \$39.99 (#4 above) + \$90 (#5 above) + \$199.95 (#6 above) + \$78,500 (#7 above) = \$78,949.94 for annually thereafter.

#### C. Medical Equipment.

- 1) Electronic communication devices for stroke call roster members – 2 electronic communication devices (cell phone and beeper/pager) X \$300 for the annual cost of each electronic communication device X 2 stroke call roster members carrying this device (one member on call and one back-up member) X 4 years X one level III stroke center = \$4,800 for the first 4 year period and 2 electronic communication devices (cell phone and beeper/pager) X \$300 each X 2 stroke call roster members carrying this device (one member on call and one back-up member) X one level III stroke centers X 1 year = \$1,200 annually thereafter.
- 2) Resuscitation equipment for the emergency department-
  - a) Laryngoscopes - at least 2 X \$300 each = \$600 X 4 years X one level III stroke center = \$2,400 for the first 4 year period and at least 2 X \$300 each X one level III stroke center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 25 packs X 4 years X one level III stroke center = \$25,000 for the first 4 year period and \$250 for a pack of 10 X 25 packs X one level III stroke center X 1 year = \$6,250 annually thereafter.
  - c) Bag-mask resuscitator - \$250 for a pack of 10 X 25 packs X 4

- years X one level III stroke center = \$25,000 for the first 4 year period and \$250 for a pack of 10 X 25 packs X one level III stroke center X 1 year = \$6,250 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level III stroke center for the first year = \$490 + \$150 upkeep and maintenance of air outlet X 3 years (years 2 through 4) X one level III stroke center = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 X 4 years X one level III stroke center = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 250 patients X 4 years X one level III stroke center = \$400 for the first 4 year period) + (masks \$2.40 X 250 patients X 4 years X one level III stroke center = \$2,400 for the first 4 year period) + (ambu bags \$10.50 X 50 X 4 years X one level III stroke center = \$2,100 for the first 4 year period) + (oxygen tank \$70 X 150 X 4 years X one level III stroke center = \$42,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 X 4 years X one level III stroke center = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for seven feet X 250 patients X 4 years X one level III stroke center = \$400 for the first 4 year period) for a total of \$54,740 for the first 4 year period and (air outlet upkeep and maintenance \$150 X one level III stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 15 = \$525 X one level III stroke center X 1 year = \$525) + (nasal cannula \$.40 X 250 patients X one level III stroke center X 1 year = \$100) + (masks \$2.40 X 250 X one level III stroke centers X 1 year = \$600) + (ambu bags \$10.50 X 50 = \$525 X one level III stroke centers X 1 year = \$525) + (oxygen tank \$70 X 150 = \$10,500 X one level III stroke center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 25 = \$750 X one level III stroke center X 1 year = \$750) + (oxygen tubing \$.40 for seven feet X 250 patients = \$100 X one level III stroke center X 1 year = \$100) for a total of \$13,250 annually thereafter.
- e) Mechanical ventilator - \$7,000 X one level III stroke center X 1 year (the first year) = \$7,000 for the first year and \$1,500 for the annual upkeep and maintenance of the mechanical ventilator X three years (years 2 through 4) X one level III stroke center = \$4,500 for a total of \$11,500 for the first 4 year period and \$1,500 for the annual upkeep and maintenance of the mechanical ventilators X one level III stroke center X 1 year = \$1,500 annually thereafter.
- f) Suction devices - suction devices canisters and tubing for wall suction \$50 X 250 patients X 4 years X one level III stroke center = \$50,000 for the first 4 year period and \$50 X 250 patients X one level III stroke center X 1 year = \$12,500 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level III stroke center = \$37,895 for the first year + \$1,500 for upkeep and maintenance X 3 years (years 2 through 4) X one level III stroke center = \$4,500 for a total of \$42,395 for

the first 4 year period and \$1,500 for the annual upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level III stroke center X 1 year = \$1,500 annually thereafter.

- h) Central line insertion equipment -  $\$600 \times 150 \text{ patients} = \$90,000$  X 4 years X one level III stroke center = \$360,000 for the first 4 year period and  $\$600 \times 150 \text{ patients} = \$90,000$  X one level III stroke center X 1 year = \$90,000 annually thereafter.
- i) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - ( $\$4.00$  each for standard intravenous fluids X 250 patients = \$1,000) + ( $\$4.00$  each for standard administration devices X 250 patients = \$1,000) + ( $\$4.00$  each for standard intravenous catheters X 250 = \$1,000) = \$3,000 X 4 years X one level III stroke center = \$12,000 for the first 4 year period and  $\$3,000$  X one level III stroke center X one year = \$3,000 annually thereafter.
- j) Intraosseous devices - needles  $\$25$  each X 150 patients = \$3,750 X 4 years X one level III stroke center = \$15,000 for the first 4 year period and  $\$25$  each X 150 patients = \$3,750 X one level III stroke center X 1 year = \$3,750 annually thereafter.
- k) Drugs necessary for emergency care - saline, epinephrine, atropine, lidocaine, magnesium sulfate  $\$100$  X 250 patients = \$25,000 X four years X one level III stroke center = \$100,000 for the first 4 year period and  $\$25,000$  X one level III stroke center X 1 year = \$25,000 annually thereafter.
- l) Two-way communication link with emergency medical service vehicles -  $\$1,200$  apiece =  $\$1,200$  X one level III stroke center X 1 year (the first year) =  $\$1,200 + \$150$  for upkeep and maintenance X 3 years (years 2 through 4) X one level III stroke center = \$450 for a total of \$1,650 for the first 4 year period and  $\$150$  for upkeep and maintenance X one level III stroke center X 1 year = \$150 annually thereafter.
- m) End-tidal carbon dioxide monitor -  $\$3,900$  X one level III stroke center X 1 year (the first year) =  $\$3,900 + \$1500$  for annual upkeep and maintenance of the end-tidal carbon dioxide monitor X 3 years (years 2 through 4) X one level III stroke center = \$4,500 for a total of \$8,400 for the first 4 year period and  $\$1,500$  for the annual upkeep and maintenance of the end-tidal carbon dioxide monitor X one level III stroke center X 1 year = \$1,500 annually thereafter.
- n) Temperature control devices for patient and resuscitation fluids -  $\$270$  pack of 10 (Bair Hugger Therapy) X 15 = \$4,050 X 4 years X one level III stroke center = \$16,200 for the first 4 year period and  $\$270$  pack of 10 (Bair Hugger Therapy) X 15 = \$4,050 X one level III stroke center X 1 year = \$4,050 annually thereafter.
- o) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries)  $\$50$  X 250 patients = \$12,500 X one level III stroke center X 4 years = \$50,000 for the first 4 year period and  $\$12,500$  X one level III

stroke center X 1 year = \$12,500 annually thereafter.

Total cost for resuscitation equipment for one level III stroke center for the emergency department for the first 4 year period – \$2,400 (letter a above) + \$25,000 (letter b above) + \$25,000 (letter c above) + \$54,740 (letter d above) + \$11,500 (letter e above) + \$50,000 (letter f above) + \$42,395 (letter g above) + \$360,000 (letter h above) + \$12,000 (letter i above) + \$15,000 (letter j above) + \$100,000 (letter k above) + \$1,650 (letter l above) + \$8,400 (letter m above) + \$16,200 (letter n above) + \$50,000 (letter o above) = \$774,285 for the first 4 year period.

Total cost for resuscitation equipment for one level III stroke center for the emergency department for annually thereafter- \$600 (letter a above) + \$6,250 (letter b above) + \$6,250 (letter c above) + \$13,250 (letter d above) + \$1,500 (letter e above) + \$12,500 (letter f above) + \$1,500 (letter g above) + \$90,000 (letter h above) + \$3,000 (letter i above) + \$3,750 (letter j above) + \$25,000 (letter k above) + \$150 (letter l above) + \$1,500 (letter m above) + \$4,050 (letter n above) + \$12,500 (letter o above) = \$181,800 for annually thereafter.

- 3) Stroke center stroke unit resuscitation equipment -
  - a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes - (laryngoscopes at least 2 X \$300 each = \$600 X 4 years X one level III stroke center = \$2,400 for the first 4 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 25 = \$6,250 X 4 years X one level III stroke center = \$25,000 for the first 4 year period) + (mechanical ventilator \$7000 X one level III stroke center X 1 year (the first year) = \$7,000 + \$1,500 for the annual upkeep and maintenance of the mechanical ventilator X 3 years (years 2 through 4) X one level III stroke center = \$4,500 for a total of \$11,500) for a total of \$31,900 for the first 4 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level III stroke center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 25 = \$6,250 X one level III stroke center X 1 year = \$6,250) + (mechanical ventilator \$1500 upkeep and maintenance X one level III stroke center X one year = \$1,500) for a total of \$8,350 annually thereafter.
  - b) Bag-mask resuscitator and sources of oxygen - (bag mask resuscitator \$250 for a pack of 10 X 25 packs = \$6,250 X 4 years X one level III stroke center = \$25,000 for the first 4 year period) + (air outlet \$70 X 7 = \$490 X 1 year (the first year) X one level III stroke center = \$490 for the first year + air outlet upkeep and maintenance \$150 X 3 years (years 2 through 4) X one level III stroke center = \$450 for a total of \$940 for air outlets for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X 4 years

X one level III stroke center = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 250 patients = \$100 X 4 years X one level III stroke center = \$400 for the first 4 year period) + (masks \$2.40 X 250 patients = \$600 X 4 years X one level III stroke center = \$2,400 for the first 4 year period) + (ambu bags \$10.50 X 50 patients = \$525 X 4 years X one level III stroke center = \$2,100 for the first 4 year period) + (oxygen tank \$70 X 150 patients = \$10,500 X 4 years X one level III stroke center = \$42,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 4 years X one level III stroke center = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X 4 years X one level III stroke center = \$400 for the first 4 year period) for a total of \$79,740 for the first 4 year period and (bag mask resuscitator \$250 for a pack of 10 X 25 packs = \$6,250 X one level III stroke center X 1 year = \$6,250) + (air outlet \$150 for upkeep and maintenance of air outlet X one level III stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level III stroke center X 1 year = \$875) + (nasal cannula \$.40 X 250 patients = \$100 X one level III stroke center X 1 year = \$100) + (masks \$2.40 X 250 patients = \$600 X one level III stroke center X 1 year = \$600) + (ambu bags \$10.50 X 50 patients = \$525 X one level III stroke center X 1 year = \$525) + (oxygen tank \$70 X 150 patients = \$10,500 X one level III stroke center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 25 = \$750 X one level III stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X one level III stroke center X 1 year = \$100) = for a total of \$19,850 annually thereafter.

- c) Suction devices - suction devices canisters and tubing for wall suction = \$50 X 250 patients = \$12,500 X 4 years X one level III stroke center = \$50,000 for the first 4 year period and \$12,500 X one level III stroke center X 1 year = \$12,500 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry \$800 X 250 patients = \$200,000 X 4 years X one level III stroke center = \$800,000) + (electrocardiograph, cardiac monitor and defibrillator \$37,895 X one year (first year) X one level III stroke center = \$37,895 + \$1500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X 3 years (years 2 through 4) X one level III stroke center = \$4,500 for a total of \$42,395) for a total of \$842,395 for the first 4 year period and (telemetry \$800 X 250 patients = \$200,000 X one level III stroke center X 1 year = \$200,000) + (\$1500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level III stroke center X 1 year = \$4,500) for a total of \$204,500 annually thereafter.
- e) All standard intravenous fluids and administration devices and intravenous catheters - (all standard intravenous fluids \$4.00 each X 250 = \$1,000) + (all standard administration devices \$4.00 each X 250 = \$1,000) + (all standard intravenous catheters \$4.00 each X 250 = \$1,000) = \$3,000 X 4 years X one level III stroke center =

\$12,000 for the first 4 year period and \$3,000 X one level III stroke center X 1 year = \$3,000 annually thereafter.

- f) Drugs necessary for emergency care - saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 250 patients = \$25,000 X 4 years X one level III stroke center = \$100,000 for the first 4 year period and \$100 X 250 patients X one level III stroke center X 1 year = \$25,000 annually thereafter.
- g) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 250 patients = \$12,500 X one level III stroke center X 4 years = \$50,000 for the first 4 year period and \$12,500 X one level III stroke center X 1 year = \$12,500 annually thereafter.

Total cost for resuscitation equipment for one level III stroke center for the stroke center stroke unit for the first 4 year period - \$31,900 (letter a above) + \$79,740 (letter b above) + \$50,000 (letter c above) + \$842,395 (letter d above) + \$12,000 (letter e above) + \$100,000 (letter f above) + \$50,000 (letter g above) = \$1,166,035 for the first 4 year period.

Total cost for resuscitation equipment for one level III stroke center for the stroke center stroke unit for annually thereafter - \$8,350 (letter a above) + \$19,850 (letter b above) + \$12,500 (letter c above) + \$204,500 (letter d above) + \$3,000 (letter e above) + \$25,000 (letter f above) + \$25,000 (letter g above) + \$12,500 (letter h above) = \$310,700 for annually thereafter.

- 4) In-house computerized tomography - average cost of CT machine is 1,000,000 X one level III stroke center X 1 year (first year) = \$1,000,000 + \$200,000 for the upkeep and maintenance of CT machine X one level III stroke center X 3 years (years 2 through 4) = \$600,000 for a total of \$1,600,000 for the first 4 year period and \$200,000 for the upkeep and maintenance of CT machine X one level III stroke center X 1 year = \$200,000 annually thereafter.
- 5) Resuscitation equipment for the radiology department -
  - a) Laryngoscopes - at least 2 X \$300 each = \$600 X 4 years X one level III stroke center = \$2,400 for the first 4 year period and \$600 X one level III stroke center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 25 = \$6,250 X 4 years X one level III stroke center = \$25,000 for the first 4 year period and \$6,250 X one level III stroke center X 1 year = \$6,250 annually thereafter.
  - c) Bag -mask resuscitator - \$250 for a pack of 10 X 25 packs =



- \$6,250 X 4 years X one level III stroke center = \$25,000 for the first 4 year period and \$6,250 X one level III stroke center X 1 year = \$6,250 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X 1 year (year 1) X one level III stroke center = \$490 + \$150 upkeep and maintenance of air outlet X 3 years (years 2 through 4) X one level III stroke center = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X 4 years X one level III stroke center = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 250 patients = \$100 X 4 years X one level III stroke center = \$400 for the first 4 year period) + (masks \$2.40 X 250 patients = \$600 X 4 years X one level III stroke center = \$2,400 for the first 4 year period) + (ambu bags \$10.50 X 50 = \$525 X 4 years X one level III stroke center = \$2,100 for the first 4 year period) + (oxygen tank \$70 X 150 = \$10,500 X 4 years X one level III stroke center = \$42,000) + (regulator for oxygen tank \$30 X 25 = \$750 X 4 years X one level III stroke centers = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X 4 years X one level III stroke center = \$400 for the first 4 year period) for a total of \$54,740 for the first 4 year period and (air outlet upkeep and maintenance \$150 X one level III stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 15 = \$525 X one level III stroke center X 1 year = \$525) + (nasal cannula \$.40 X 250 patients = \$100 X one level III stroke center X 1 year = \$100) + (masks \$2.40 X 250 patients = \$600 X one level III stroke center = \$600) + (ambu bags \$10.50 X 50 = \$525 X one level III stroke center X 1 year = \$525) + (oxygen tank \$70 X 150 = \$10,500 X one level III stroke center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 25 = \$750 X one level III stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X one level III stroke center X 1 year = \$100) for a total of \$13,250 annually thereafter.
- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 250 patients = \$12,500 X 4 years X one level III stroke center = \$50,000 for the first 4 year period and \$50 X 250 patients X one level III stroke center X 1 year = \$12,500 annually thereafter.
- f) Telemetry - average of \$800 X 250 patients = \$200,000 X 4 years X one level III stroke center = \$800,000 for the first 4 year period and \$200,000 X one level III stroke center X one year = \$200,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - (\$37,895 X 1 year (first year) X one level III stroke center = \$37,895 + \$1,500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X 3 years (years 2 through 4) X one level III stroke center = \$4,500) for a total of \$42,395 for the first 4 year period and \$1,500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level III stroke center X 1 year = \$1,500 annually thereafter.

- h) All standard intravenous fluids - \$4.00 each X 250 patients X 4 years X one level III stroke center = \$4,000 for the first 4 year period and \$4.00 each X 250 patients X one level III stroke center X 1 year = \$1,000 annually thereafter.
- i) All standard administration devices - \$4.00 each X 250 patients X 4 years X one level III stroke center = \$4,000 for the first 4 year period and \$4.00 each X 250 patients X one level III stroke center X 1 year = \$1,000 annually thereafter.
- j) All standard intravenous catheters - \$4.00 each X 250 patients X 4 years X one level III stroke center = \$4,000 for the first 4 year period and \$4.00 each X 250 patients X one level III stroke center X 1 year = \$1,000 annually thereafter.
- k) Drugs necessary for emergency care - saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 250 patients = \$25,000 X 4 years X one level III stroke center = \$100,000 for the first 4 year period and \$25,000 X one level III stroke center X 1 year = \$25,000 annually thereafter.
- l) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 250 patients = \$12,500 X one level III stroke center X 4 years = \$50,000 for the first 4 year period and \$12,500 X one level III stroke center X 1 year = \$12,500 annually thereafter.

Total cost for resuscitation equipment for one level III stroke center for the radiology department for the first 4 year period – \$2,400 (letter a above) + \$25,000 (letter b above) + \$25,000 (letter c above) + \$54,740 (letter d above) + \$50,000 (letter e above) + \$800,000 (letter f above) + \$42,395 (letter g above) + \$4,000 (letter h above) + \$4,000 (letter i above) + \$4,000 (letter j above) + \$100,000 (letter k above) + \$50,000 (letter l above) = \$1,161,535 for the first 4 year period.

Total cost for resuscitation equipment for one level III stroke center for the radiology department for annually thereafter - \$600 (letter a above) + \$6,250 (letter b above) + \$6,250 (letter c above) + \$13,250 (letter d above) + \$12,500 (letter e above) + \$200,000 (letter f above) + \$1,500 (letter g above) + \$1,000 (letter h above) + \$1,000 (letter i above) + \$1,000 (letter j above) + \$25,000 (letter k above) + \$12,500 (letter l above) = \$280,850 for annually thereafter.

**6) Laboratory Services -**

- a) Standard analyses of blood, urine and other body fluids - costs of materials \$200 X 250 patients = \$50,000 X 4 years X one level III stroke center = \$200,000 for the first 4 year period and \$50,000 X one level III stroke center X 1 year = \$50,000 annually thereafter.
- b) Blood typing and cross matching - centrifuge \$2000 X 1 year (first year) X one level III stroke center = \$2,000 + \$250 for the upkeep and maintenance of the centrifuge X 3 years (years 2 through 4) X one level III stroke center = \$750 for a total of \$2,750 for the first 4

year period and \$250 for the upkeep and maintenance of the centrifuge X one level III stroke center X 1 year = \$250 annually thereafter.

- c) Coagulation studies - \$200 materials X 125 patients = \$25,000 X 4 years X one level III stroke center = \$100,000 for the first 4 year period and \$200 materials X 125 patients X one level III stroke center X one year = \$25,000 annually thereafter.
- d) Blood bank or access to a community central blood bank and adequate hospital blood storage facilities - at the least blood storage refrigerators 1 large refrigerator/use of community central blood bank at \$15,000 X 1 year (year 1) X one level III stroke center = \$15,000 + \$1,500 for upkeep and maintenance X 3 years (years 2 through 4) X one level III stroke center = \$4,500 for a total of \$19,500 the first 4 year period and \$1500 X one level III stroke center X 1 year = \$1,500 annually thereafter.
- e) Blood gases and pH determinations - at least 1 blood gas analyzer and kit \$3000 X 4 years X one level III stroke center = \$12,000 for the first 4 year period and \$3,000 X one level III stroke center X 1 year = \$3,000 annually thereafter.
- f) Blood chemistries - test and kits an average of \$350 X 100 patients = \$35,000 X 4 years X one level III stroke center = \$140,000 for the first 4 year period and \$35,000 X one level III stroke center X 1 year = \$35,000 annually thereafter.

Total cost for laboratory services for one level III stroke center for the first 4 year period - \$200,000 (letter a above) + \$2,750 (letter b above) + \$100,000 (letter c above) + \$19,500 (letter d above) + \$12,000 (letter e above) + \$140,000 (letter f above) = \$474,250 for the first 4 year period.

Total cost for laboratory services for one level III stroke center for annually thereafter - \$50,000 (letter a above) + \$250 (letter b above) + \$25,000 (letter c above) + \$1,500 (letter d above) + \$3,000 (letter e above) + \$35,000 (letter f above) = \$114,750 for annually thereafter.

Total cost for medical equipment for one level III stroke center for the first 4 year period - \$4,800 (#1 above) + \$774,285 (#2 above) + \$1,166,035 (#3 above) + \$1,600,000 (#4 above) + \$1,161,535 (#5 above) + \$474,250 (#6 above) = \$5,180,905 for the first 4 year period.

Total cost for medical equipment for annually thereafter - \$1,200 (#1 above) + \$181,800 (#2 above) + \$310,700 (#3 above) + \$200,000 (#4 above) + \$280,850 (#5 above) + \$114,750 (#6 above) = \$1,089,300 for annually thereafter.

- D. The stroke center shall have support services to assist the patient's family from time of entry into the facility to time of discharge - 1 full time equivalent medical social worker \$66,000 annually X 4 years X one level

III stroke center = \$264,000 for the first 4 year period and \$66,000 X one level III stroke center X 1 year = \$66,000 annually thereafter.

- E. The stroke center shall have a stroke rehabilitation program or plan to refer those stroke patients that require rehabilitation to another facility or community agency that can provide necessary services - physical therapist \$74,075 annually + occupational therapist \$72,763 annually + speech therapist/pathologist \$67,834 annually = \$214,672 X 4 years X one level III stroke center = \$858,688 for the first 4 year period and \$214,672 X one level III stroke center X 1 year = \$214,672.
- F. Courses/conferences for the stroke medical director who is not board certified/board admissible/attend one national, regional or state meeting every 3 years in cerebrovascular disease.
- a) National or international stroke course or conference - (\$1200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level III stroke center X 4 years = \$0 for the first year and \$2,950 X no level III stroke center X 1 year = \$0 annually thereafter.
  - b) Regional stroke course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level III stroke center X 1 course (1 course required every 3 years) = \$1,750 for the first 4 year period and \$1,750 X one level III stroke center X 1 year = \$1,750 annually thereafter.
  - c) State stroke course or conference (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level III stroke center X 4 years = \$0 for the first 4 year period and \$1,150 X no level III stroke center X 1 year = \$0 annually thereafter.
- G. Stroke registry
- a) Computer with internet capability/access \$600 computer + internet fee \$100/month \$1200 annually X 4 years X one level III stroke center = \$7,200 for the first 4 year period and \$1,800 X one level III stroke center X 1 year = \$1,800 annually thereafter.
  - b) Patient registrar - \$36,258 annually X 4 years X one level III stroke center = \$145,032 for the first 4 year period and \$36,258 X one level III stroke center X 1 year = \$36,258 annually thereafter.
  - c) Training to set up stroke registry system/program for data entry- \$200 annually X 4 years X one level III stroke center = \$800 for the first 4 year period and \$200 X one level III stroke center X 1 year = \$200 annually thereafter.
- H. Public education program to promote stroke prevention and stroke symptoms awareness- e.g. community health fairs costs of printing and advertisement costs (posters, brochures etc...) \$350 for each health fair X 12 health fairs annually = \$4,200 annually X 4 years X one level III stroke center = \$16,800 for the first 4 year period and \$4,200 X one level III stroke center X 1 year = \$4,200 annually thereafter.

- I. Patient education program to promote stroke prevention and stroke symptoms awareness - printing costs of brochures etc... \$500 annually X 4 years X one level III stroke center = \$2,000 for the first 4 year period and \$500 X one level III stroke center X 1 year = \$500 annually thereafter.
- J. Professional education outreach program in catchment areas to provide training and other supports to improve care of stroke patients-e.g. hospitals sponsor at least 1 conference per year within their service area at the cost of \$2000 annually X 4 years X one level III stroke center = \$8,000 for the first 4 year period and \$2,000 X one level III stroke center X 1 year = \$2,000 annually thereafter.
- K. Stroke centers shall be actively involved in local and regional EMS systems by providing training and clinical educational resources - hospitals sponsor at least 1 conference per year within their area for EMS at the cost of \$2000 annually X 4 years X one level III stroke center = \$8,000 for the first 4 year period and \$2,000 X one level III stroke center X 1 year = \$2,000 annually thereafter.
- L. A lighted designated helicopter landing area at the stroke center to accommodate incoming medical helicopters which shall be cordoned off at all times from the general public. The stroke center shall also have a landing area on the hospital premises no more than three (3) minutes from the emergency room - (construction of helipad estimate of \$36,000 X 1 helipad X one level III stroke center X 1 year (the first year) = \$36,000) + (maintenance and upkeep of helipad \$2,000 X 3 years (years 2 through 4) X one level III stroke center = \$6,000) for a total of \$42,000 for the first 4 year period for the helipad + (cordoning barrier \$4,300 X 1 year (the first year) X one level III stroke center = \$4,300) + \$500 for maintenance and upkeep of the cordoning barrier X 3 years (years 2 through 4) X one level III stroke center = \$1,500) for a total of \$5,800 for the first 4 year period for the cordoning barrier for a total of \$47,800 for the first 4 year period and \$2,000 for maintenance and upkeep of helipad + \$500 for maintenance and upkeep of the cordoning barrier = \$2,500 X 1 year X one level III stroke center = \$2,500 annually thereafter.

Total cost for one level III stroke center for the first 4 year period -  
[\$18,680,576 letter A above] + [\$315,799.76 letter B above] + [\$5,180,905 letter C above] + [\$264,000 letter D above] + [\$858,688 letter E above] +  
[\$1,750 letter F above] + [\$153,032 letter G above] + [\$16,800 letter H above]  
+ [\$2,000 letter I above] + [\$8,000 letter J above] + [\$8,000 letter K above] =  
[\$47,800 letter L above] = \$25,537,350 for the first 4 year period.

Total cost for one level III stroke center for annually thereafter - [\$4,670,144 letter A above] + [\$78,949.94 letter B above] + [\$1,089,300 letter C above] +  
[\$66,000 letter D above] + [\$214,672 letter E above] + [\$1,750 letter F above]  
+ [\$38,258 letter G above] + [\$4,200 letter H above] + [\$500 letter I above] +

[**\$2,000 letter J above**] + [**\$2,000 letter K above**] + [**\$2,500 letter L above**] =  
**\$6,170,273.90 for annually thereafter.**

**It is expected that two level III stroke centers will be designated during the first 4 year period (\$51,074,700) and those 2 same level III stroke centers and 1 additional level III stroke center will be designated again at some time (4 year intervals) annually thereafter (\$18,510,821).**

#### **4. Level IV stroke center.**

##### **A. Medical Professionals.**

- 1) A physician experienced in diagnosing and treating cerebrovascular diseases - \$204,430 annually X 4 years X one level IV stroke center = \$817,720 for the first 4 year period and \$204,430 annually X one level IV stroke center X 1 year = \$204,430 annually thereafter.**
- 2) A least one other health care professional or qualified individual credentialed in stroke patient care - \$126,046 annually X 4 years X one level IV stroke center = \$504,184 for the first 4 year period and \$126,046 annually X one level IV stroke center X 1 year = \$126,046 annually thereafter.**
- 3) Stroke center medical director who is recommended to be a board certified or board admissible physician - \$204,430 annually X 4 years X one level IV stroke center = \$817,720 for the first 4 year period and \$204,430 X one level IV stroke center X 1 year = \$204,430 annually thereafter.**
- 4) Stroke program manager/coordinator who is a registered nurse or qualified individual - \$126,046 annually X 4 years X one level IV stroke center = \$504,184 for the first 4 year period and \$126,046 annually X one level IV stroke center X 1 year = \$126,046 annually thereafter.**
- 5) Medical director of the emergency department who is recommended to be a board certified or board-admissible physician - \$199,038 X 4 years X one level IV stroke center = \$796,152 for the first 4 year period and \$199,038 X one level IV stroke center X 1 year = \$199,038 annually thereafter.**
- 6) Registered nurses in the emergency department - \$64,533 annually X 3 registered nurses X 4 years X one level IV stroke center = \$774,396 for the first 4 year period and \$64,533 annually X 3 registered nurses X one level IV stroke center X 1 year = \$193,599 annually thereafter.**
- 7) Emergency department physician credentialed for stroke care by the stroke center 24 hours a day, 7 days a week - \$244,973 annually X 3 emergency department physicians X 4 years X one level IV stroke center = \$2,939,676 for the first 4 year period and \$244,973 annually X 3 emergency department physicians X one level IV stroke center X 1 year = \$734,919 annually thereafter.**

**Total salary cost for medical professionals for one level IV stroke center for the first 4 year period - [\$817,720 number 1 above] + [\$504,184 number 2 above] + [\$817,720 number 3 above] + [\$504,184 number 4 above] + [\$796,152 number 5 above] + [\$774,396 number 6 above] + [\$2,939,676 number 7 above] = \$7,154,032 for the first 4 year period.**

**Total salary cost for medical professionals for one level IV stroke center for annually thereafter - [\$204,430 number 1 above] + [\$126,046 number 2 above] + [\$204,430 number 3 above] + [\$126,046 number 4 above] + [\$199,038 number 5 above] + [\$193,599 number 6 above] + [\$734,919 number 7 above] = \$1,788,508 for annually thereafter.**

**B. Continuing education costs for level IV stroke center staff.**

- 1) Level IV stroke call roster member (emergency department physician) shall complete a minimum average of 8 hours of continuing education in cerebrovascular disease every 2 years - average of \$10.00 per hour for online training X 4 hours X 4 years X one level IV stroke center = \$160 for the first 4 year period and \$10 X 4 hours X one level IV stroke center X 1 year = \$40 annually thereafter.**
- 2) Level IV stroke call roster member (others as appropriate) shall complete a minimum average of 8 hours of continuing education in cerebrovascular disease every 2 years - average of \$10.00 per hour for online training X 4 hours X 4 years X one level IV stroke center = \$160 for the first 4 year period and \$10 X 4 hours X one level IV stroke center X 1 year = \$40 annually.**
- 3) A level IV stroke center medical director shall complete a minimum of 8 hours of continuing medical education every 2 years in the area of cerebrovascular disease - average of \$10.00 per hour for online training X 4 hours X 4 years X one level IV stroke center = \$160 for the first 4 year period and \$10 X 4 hours X one level IV stroke center X 1 year = \$40 annually.**
- 4) A level IV program manager/coordinator shall complete a minimum of 8 hours of continuing education every 2 years in cerebrovascular disease - average of \$39.99 annually for online training X 4 years X one level IV stroke center = \$159.96 for the first 4 year period and \$39.99 annually X one level IV stroke center X one year = \$39.99 annually thereafter.**
- 5) Emergency department physicians in level IV stroke centers shall complete a minimum average of 6 hours of continuing medical education in cerebrovascular disease every 2 years - average of \$10.00 per hour for online training X 3 emergency department physicians X 3 hours of continuing medical education X 4 years X one level IV stroke center = \$360 for the first 4 year period and \$10 per hour for online training X 3 emergency department physicians X 3 hours of continuing medical education X one level IV stroke center X one year = \$90 annually thereafter.**

- 6) Registered nurses assigned to the emergency departments in level IV stroke centers shall complete a minimum of 6 hours of continuing education in the area of cerebrovascular disease every 2 years - average of \$39.99 annually for online training X 5 registered nurses in the emergency department X 4 years X one level IV stroke center = \$799.80 for the first 4 year period and \$39.99 X 5 registered nurses X one level IV stroke center X 1 year = \$199.95 annually thereafter.

Total cost for continuing education for one level IV stroke center for the first 4 year period - [\$160 number 1 above] + [\$160 number 2 above] + [\$160 number 3 above] + [\$159.96 number 4 above] + [\$360 number 5 above] + [\$799.80 number 6 above] = \$1,799.76 for the first 4 year period.

Total cost for continuing education for one level IV stroke center for annually thereafter - [\$40 number 1 above] + [\$40 number 2 above] + [\$40 number 3 above] + [\$39.99 number 4 above] + [\$90 number 5 above] + [\$199.95 number 6 above] = \$449.94 for annually thereafter.

#### C. Medical Equipment.

- 1) Electronic communication devices for stroke call roster members - 2 electronic communication devices (cell phone and beeper/pager X \$300 for the annual cost of each electronic communication device X 2 stroke call roster members carrying this device (one member on call and one back up member) X 4 years X one level IV stroke center = \$4,800 for the first 4 year period and 2 electronic communication devices (cell phone and beeper/pager) X \$300 for the annual cost of each electronic communication device X 2 stroke call roster members carrying this device (one member on call and one back-up member) X one level IV stroke center X 1 year = \$1,200 annually thereafter.
- 2) Resuscitation equipment for the emergency department -
  - a) Laryngoscopes - at least 2 X \$300 each = \$600 X 4 years X one level IV stroke center = \$2,400 for the first 4 year period and at least 2 X \$300 each X one level IV stroke center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 25 packs X 4 years X one level IV stroke center = \$25,000 for the first 4 year period and \$250 for a pack of 10 X 25 packs X one level IV stroke center X 1 year = \$6,250 annually thereafter.
  - c) Bag-mask resuscitator - \$250 for a pack of 10 x 25 packs X 4 years X one level IV stroke center = \$25,000 for the first 4 year period and \$250 for a pack of 10 X 25 packs X one level IV stroke center = \$6,250 annually thereafter.
  - d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level IV stroke center for the first year = \$490 + \$150 upkeep and maintenance of air outlet X 3 years X one level IV stroke center = \$450 for a total of \$940 for air outlets for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X 4 years X one level IV stroke center =



\$3,500 for the first four year period) + (nasal cannula \$.40 X 250 patients = \$100 X 4 years X one level IV stroke center = \$400 for the first 4 year period) + (masks \$2.40 X 250 patients = \$600 X 4 years X one level IV stroke center = \$2,400 for the first 4 year period) + (ambu bags \$10.50 X 50 = \$525 X 4 years X one level IV stroke center = \$2,100 for the first 4 year period) + (oxygen tank \$70 X 150 = \$10,500 X 4 years X one level IV stroke center = \$42,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 4 years X one level IV stroke center = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X 4 years X one level IV stroke center = \$400 for the first 4 year period) for a total of \$54,740 for the first 4 year period and (air outlet upkeep and maintenance \$150 X one level IV stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 15 = \$525 X one level IV stroke center X 1 year = \$525) + (nasal cannula \$.40 X 250 patients = \$100 X one level IV stroke center X one year = \$100) + (masks \$2.40 X 250 = \$600 X one level IV stroke center X 1 year = \$600) + (ambu bags \$10.50 X 50 = \$525 X one level IV stroke center X 1 year = \$525) + (oxygen tank \$70 X 150 = \$10,500 X one level IV stroke center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 25 = \$750 X one level IV stroke center X 1 year = \$750) + (oxygen tubing \$.40 for seven feet X 250 patients = \$100 X one level IV stroke center X 1 year = \$100) for a total of \$13,250 annually thereafter.

- e) Suction devices - suction device canisters and tubing for wall suction \$50 X 250 patients = \$12,500 X 4 years X one level IV stroke center = \$50,000 for the first 4 year period and \$50 X 250 patients X one level IV stroke center X one year = \$12,500 annually thereafter.
- f) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level IV stroke center = \$37,895 for the first year + \$1,500 for upkeep and maintenance X 3 years (years 2 through 4) X one level IV stroke center = \$4,500 for a total of \$42,395 for the first 4 year period and \$1,500 for the annual upkeep, maintenance and possible replacement X one level IV stroke center X 1 year = \$1,500 annually thereafter.
- g) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 250 patients = \$1,000) + (\$4.00 each for standard administration devices X 250 patients = \$1,000) + (\$4.00 each for standard intravenous catheters X 250 patients = \$1,000) = \$3,000 X 4 years X one level IV stroke center = \$12,000 for the first 4 year period and \$3,000 X one level IV stroke center X 1 year = \$3,000 annually thereafter.
- h) Intraosseous devices - needles \$25 each X 150 patients = \$3,750 X 4 years X one level IV stroke center = \$15,000 for the first 4 year period and \$25 each X 150 patients = \$3,750 X one level IV stroke center X 1 year = \$3,750 annually thereafter.
- i) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 250 patients =

\$25,000 X 4 years X one level IV stroke center = \$100,000 for the first 4 year period and \$100 X 250 patients X one level IV stroke center X 1 year = \$25,000 annually thereafter.

- j) Two-way communication link with emergency medical service vehicles - \$1,200 apiece = \$1,200 X one level IV stroke center X 1 year (the first year) = \$1,200 + \$150 for upkeep and maintenance X 3 years (years 2 through 4) X one level IV stroke center = \$450 for a total of \$1,650 for the first 4 year period and \$150 X one level IV stroke center X 1 year = \$150 annually thereafter.
- k) End-tidal carbon dioxide monitor - \$3900 X one level IV stroke center X 1 year (the first year) = \$3,900 + \$1,500 for the annual upkeep and maintenance X one level IV stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$8,400 for the first 4 year period and \$1500 X one level IV stroke center X 1 year = \$1,500 annually thereafter.
- l) Temperature control devices for patient and resuscitation fluids \$270 pack of 10 (Bair Hugger Therapy) X 15 = \$4,050 X 4 years X one level IV stroke center = \$16,200 for the first 4 year period and \$270 pack of 10 (Bair Hugger Therapy) X 15 = \$4,050 X one level IV stroke center X 1 year = \$4,050 annually thereafter.
- m) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 250 patients = \$12,500 X one level III stroke center X 4 years = \$50,000 for the first 4 year period and \$12,500 X one level III stroke center X 1 year = \$12,500 annually thereafter.

Total cost for resuscitation equipment for one level IV stroke center for the emergency department for the first 4 year period – \$2,400 (letter a above) + \$25,000 (letter b above) + \$25,000 (letter c above) + \$54,740 (letter d above) + \$50,000 (letter e above) + \$42,395 (letter f above) + \$12,000 (letter g above) + \$15,000 (letter h above) + \$100,000 (letter i above) + \$1,650 (letter j above) + \$8,400 (letter k above) + \$16,200 (letter l above) + \$50,000 (letter m above) = \$402,785 for the first 4 year period.

Total cost for resuscitation equipment for one level IV stroke center for the emergency department for annually thereafter - \$600 (letter a above) + \$6,250 (letter b above) + \$6,250 (letter c above) + \$13,250 (letter d above) + \$12,500 (letter e above) + \$1,500 (letter f above) + \$3,000 (letter g above) + \$3,750 (letter h above) + \$25,000 (letter i above) + \$150 (letter j above) + \$1,500 (letter k above) + \$4,050 (letter l above) + \$12,500 (letter m above) = \$90,300 for annually thereafter.

### 3) Laboratory Services -

- a) Standard analyses of blood, urine and other body fluids - costs of

- materials \$200 X 250 patients = \$50,000 X 4 years X one level IV stroke center = \$200,000 for the first 4 year period and \$50,000 X one level IV stroke center X 1 year = \$50,000 annually thereafter.
- b) Coagulation studies - \$200 materials X 250 patients = \$50,000 X 4 years X one level IV stroke center = \$200,000 for the first 4 year period and \$50,000 X one level IV stroke center X 1 year = \$50,000 annually thereafter.
- c) Blood bank or access to a community central blood bank and adequate hospital blood storage facilities - at the least blood storage refrigerators 1 large refrigerator/use of community central blood bank at \$15,000 X one level IV stroke center X 1 year (the first year = \$15,000 for the first year + \$1,500 X 3 years (years 2 through 4) X one level IV stroke center = \$4,500 for a total of \$19,500 for the first 4 year period and \$1,500 X one level IV stroke center X 1 year = \$4,500 annually thereafter.
- d) Blood gases and pH determinations - at least 1 blood gas analyzer and kit \$3000 X 4 years X one level IV stroke center = \$12,000 for the first 4 year period and \$3,000 X one level IV stroke center X 1 year = \$3,000 annually thereafter.
- e) Blood chemistries - test and kits average of \$350 X 100 patients = \$35,000 X 4 years X one level IV stroke center = \$140,000 for the first 4 year period and \$35,000 X one level IV stroke center X 1 year = \$35,000 annually thereafter.

Total cost for laboratory services for one level IV stroke center for the first 4 year period – \$200,000 (letter a above) + \$200,000 (letter b above) + \$19,500 (letter c above) + \$12,000 (letter d above) + \$140,000 (letter e above) = \$571,500 for the first 4 year period.

Total cost for laboratory services for one level IV stroke center for annually thereafter - \$50,000 (letter a above) + \$50,000 (letter b above) + \$4,500 (letter c above) + \$3,000 (letter d above) + \$35,000 (letter e above) = \$142,500 for annually thereafter.

Total cost for one level IV stroke center for medical equipment for the first 4 year period - \$4,800 (number 1 above) + \$402,785 (number 2 above) + \$571,500 (number 3 above) = \$979,085 for the first 4 year period.

Total cost for one level IV stroke center for medical equipment for annually thereafter - \$1,200 (number 1 above) + \$90,300 (number 2 above) + \$142,500 (number 3 above) = \$234,000 for annually thereafter.

- D. The stroke center shall have support services to assist the patient's family from time of entry into the facility to time of discharge - at least 1 full time equivalent medical social worker \$66,000 annually X 4 years X one level IV stroke center = \$264,000 for the first 4 year period and

**\$66,000 X one level IV stroke center X 1 year = \$66,000 annually thereafter.**

**E. Courses/conferences for stroke medical directors who are not board certified-**

- 1) National or international stroke course or conference - (\$1200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level IV stroke center - \$0 for the first 4 year period and \$2,950 X no level IV stroke center X 1 year = \$0 annually thereafter.**
- 2) Regional stroke course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level IV stroke center = \$1,750 X 1 course/conference (1 course/conference every 3 years) = \$1,750 for the first 4 year period and \$1,750 X one level IV stroke center X 1 course/conference (1 course/conference every 3 years) = \$1,750 annually thereafter.**
- 3) State stroke course or conference (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level IV stroke center X 4 years = \$0 for the first 4 year period and \$1,150 X no level IV stroke center X 1 year = \$0 annually thereafter.**

**F. Stroke registry -**

- a) Computer with internet capability/access \$600 computer + internet fee \$100/month \$1200 annually X 4 years X one level IV stroke center = \$7,200 for the first 4 year period and \$1,800 X one level IV stroke center X 1 year = \$1,800 annually thereafter.**
- b) Patient registrar - \$36,258 annually X 4 years X one level IV stroke center = \$145,032 for the first 4 year period and \$36,258 X one level IV stroke center X 1 year = \$36,258 annually thereafter.**
- c) Training to set up stroke registry system/program for data entry - \$200 annually X 4 years X one level IV stroke center = \$800 for the first 4 year period and \$200 X one level IV stroke center X 1 year = \$200 annually thereafter.**

**G. Public education program to promote stroke prevention and stroke symptoms awareness - e.g. community health fairs costs of printing and advertisement costs (posters, brochures etc...) \$350 for each health fair x 12 health fairs annually X 4 years = \$16,800 annually X one level IV stroke center = \$16,800 for the first 4 year period and \$4,200 annually X one level IV stroke center X 1 year = \$4,200 annually thereafter.**

**H. Patient education program to promote stroke prevention and stroke symptoms awareness - printing costs of brochures etc... \$500 annually X 4 years X one level IV stroke center = \$2,000 for the first 4 year period and \$500 X one level IV stroke center X 1 year = \$500 annually thereafter.**

- I. Stroke centers shall be actively involved in local and regional EMS systems by providing training and clinical educational resources - hospitals sponsor at least 1 conference per year within their area for EMS at the cost of \$2000 annually X 4 years X one level IV stroke center = \$8,000 for the first 4 year period and \$2,000 X one level IV stroke center X 1 year = \$2,000 annually thereafter.
- J. A lighted designated helicopter landing area at the stroke center to accommodate incoming medical helicopters which shall be cordoned off at all times from the general public. The stroke center shall also have a landing area on the hospital premises no more than three (3) minutes from the emergency room - (construction of helipad estimate of \$36,000 X 1 helipad X one level IV stroke center X 1 year (the first year) = \$36,000) + (maintenance and upkeep of helipad \$2,000 X 3 years (years 2 through 4) X one level IV stroke center = \$6,000) for a total of \$42,000 for the first 4 year period for the helipad + (cordoning barrier \$4,300 X 1 year (the first year) X one level IV stroke center = \$4,300) + \$500 for maintenance and upkeep of the cordoning barrier X 3 years (years 2 through 4) X one level IV stroke center = \$1,500) for a total of \$5,800 for the first 4 year period for the cordoning barrier for a total of \$47,800 for the first 4 year period and \$2,000 for maintenance and upkeep of helipad + \$500 for maintenance and upkeep of the cordoning barrier = \$2,500 X 1 year X one level IV stroke center = \$2,500 annually thereafter.

Total cost for one level IV stroke center for the first 4 year period - \$7,154,032 (letter A above) + \$1,799.76 (letter B above) + \$979,085 (letter C above) + \$264,000 (letter D above) + \$1,750 (letter E above) + \$153,032 (letter F above) + \$16,800 (letter G above) + \$2,000 (letter H above) + \$8,000 (letter I above) + \$47,800 (letter J above) = \$8,628,298.70 for the first 4 year period.

Total cost for one level IV stroke center for annually thereafter- \$1,788,508 (letter A above) + \$449.94 (letter B above) + \$234,000 (letter C above) + \$66,000 (letter D above) + \$1,750 (letter E above) + \$38,258 (letter F above) + \$4,200 (letter G above) + \$500 (letter H above) + \$2,000 (letter I above) + \$2,500 (letter J above) = \$2,138,165.90 for annually thereafter.

It is expected that two level IV stroke centers will be designated during the first 4 year period (\$17,256,597) and those two same level IV stroke centers and 1 additional level IV stroke center will be designated again at some time (4 year intervals) annually thereafter (\$6,414,497.70).

5. Cost to the Department of Health and Senior Services for the Stroke Program.

- A. Computer - cost of contract to build stroke database for stroke registry - \$25,000 for the first year = \$25,000 + \$6,800 per year for years 2 through 4 for cost of contract for maintenance of stroke registry database = \$20,400 for a total of \$45,400 for a 4 year period and \$6,800 per year for cost of contract for maintenance of stroke registry = \$6,800 for annually thereafter.

Total cost for the first 4 year period - (\$56,620,276 Level I- number 1 above) + (\$52,452,071 Level II- number 2 above) + (\$51,074,700 Level III-number 3 above) + (\$17,256,597 Level IV-number 4 above) + (\$45,400 DHSS costs) = \$177,449,044 for the first 4 year period.

Total cost for annually thereafter - (\$13,455,172 Level I- number 1 above) + (\$12,026,107 Level II- number 2 above) + (\$18,510,821 Level III- number 3 above) + (\$6,414,497.70 Level IV-number 4 above) + (\$6,800 DHSS costs) = \$50,413,398 for annually thereafter. This number has been rounded up.

#### IV. ASSUMPTIONS

The staffing and equipment requirements for designated stroke centers are based on recommendations from a task force comprised of physicians and other health care providers from hospitals and emergency medical services agencies throughout the state and national standards and guidelines for stroke centers.

Participation in Missouri's stroke center program is voluntary and no hospital shall be required to participate. However, if a hospital chooses to apply to be designated as a state stroke center and would like to hold itself out as a state designated stroke center, then it must apply for, be approved, comply with the applicable statutes and regulations and bear the costs detailed in this fiscal note. The costs in this fiscal note are for those hospitals which apply for and are approved to be a state designated stroke center. Also, it is important to note that those hospitals applying for the appropriate levels of stroke centers already have most of these items detailed in this fiscal note. This is explained throughout this assumption section below.

To obtain the potential numbers of stroke centers that might be applying in the future to be a state designated stroke center, the Department of Health and Senior Services used the number of state designated trauma centers as a guide. The Missouri trauma center program has been in effect since 1998. It should be noted that there are only 3 levels of trauma centers currently in Missouri (Level I, Level II and Level III).

There are approximately 18 public hospitals in Missouri.

Costs are estimated for a 4 year period because the designation for stroke centers will be for a period of 4 years.

Salaries are based on average salaries as reported by salary.com available on the Internet.

Staffing is based on minimum levels required by the rule. Some hospitals may choose to have additional staff as they deem appropriate to maintain levels of patient care.

Equipment costs are based on the minimum levels required by the rule. These equipment costs are based on the amount it would cost to purchase these items through medical equipment suppliers.

Costs are expected to increase at an average rate of inflation.

The Department of Health and Senior Services estimated that there will be at least one designated level I public hospital stroke center during the first 4 year period and this same level I stroke center will be designated annually thereafter.

The Department of Health and Senior Services estimated that there will be at least one designated level II public hospital stroke center during the first 4 year period and this same level II stroke center will be designated annually thereafter.

The Department of Health and Senior Services estimated that there will be at least 2 designated level III public hospital stroke centers during the first 4 year period and these same 2 level III stroke centers plus 1 more level III stroke center for a total of 3 level III stroke centers will be designated annually thereafter.

The Department of Health and Senior Services estimated that there will be at least 2 designated level IV public hospital stroke centers during the first 4 year period and these same 2 level IV stroke centers plus 1 more level IV stroke center for a total of 3 level IV stroke centers will be designated annually thereafter.

Many of the hospitals requesting to be a state designated stroke center are going to have several of the required medical professionals already on staff so the costs of the medical professionals will probably not be a new cost to many hospitals. However, for hospitals without current stroke centers, the stroke medical director (required for levels I-IV), the stroke program manager (required for levels I-IV), staff required for the stroke unit (required for levels I -III), a neurointerventionalist (required for level I) and a nurse educator to ensure staff meet core competencies (required for levels I-II) might be new costs to these stroke centers. In addition, services for medical professionals (such as doctors) are billed out to the patient and the hospitals recover those costs or the hospital may not even pay the physician and the physician may directly bill the patient for the services rendered. Therefore many of these medical professional costs won't even be incurred by the stroke centers or will be recovered by the stroke centers.

Physicians are required to complete continuing medical education pursuant to the stroke regulations; however, this will most likely not be a new cost to physicians as physicians licensed in Missouri are required to complete fifty hours of continuing medical education every 2 years. Further, when figuring the costs of the continuing medical education and continuing education, the Department of Health and Senior Services used costs for online training. It should be noted that there are many free continuing education opportunities throughout the state of Missouri annually for both physicians and nurses. In addition, many physicians are independent from the

hospitals and will incur these costs personally instead of the hospital incurring these costs.

Resuscitation equipment costs were detailed for each department for which resuscitation was required to be available. However, level I stroke centers will already have a neurointerventional laboratory, an emergency department, an intensive care unit, a radiology department, an operating room, and a post-anesthesia recovery room and many will already have a stroke unit. It is reasonable to believe that all of these departments currently existing in these hospitals already have resuscitation equipment so these costs will most likely not be new costs to level I stroke centers. Further, many of these costs in the resuscitation equipment (such as drugs necessary for emergency care) will be charged back to the stroke patient so the stroke center will most likely recover these costs.

For level II stroke centers, it is likely the hospital requesting to be a level II stroke center will already have an emergency department, an intensive care unit, a radiology department, an operating room and a post-anesthesia recovery room. Further these departments will already have the required resuscitation equipment. Many of these costs for resuscitation equipment will be charged to the stroke patient so the stroke centers will most likely be able to recover these costs.

For level III stroke centers, it is likely the hospital requesting to be a level III stroke center will already have an emergency department and a radiology department. Further, these departments will already have the required resuscitation equipment. Many of these costs for resuscitation equipment will be charged to the stroke patient, so the stroke centers will most likely be able to recover these costs.

For level IV stroke centers, it is likely the hospital requesting to be a level IV stroke center will already have an emergency department. Further this emergency department will already have the required resuscitation equipment. Many of these costs for resuscitation equipment will be charged to the stroke patients, so the stroke centers will most likely be able to recover these costs.

For level I, II and III stroke centers, it is very likely the hospitals requesting to be a level I, II or III stroke center will already have a Computerized Tomography (CT) scan so this will not be a new cost to these stroke centers.

For level I and II stroke centers, it is very likely the hospitals requesting to be a level I or level II stroke center will already have a magnetic resonance imaging (MRI) machine.

For level I and II stroke centers, it is very likely the hospitals requesting to be a level I or II stroke center will already have ultrasound/echo machines.

For level I and II stroke centers, it is very likely the hospitals requesting to be a level I or II stroke center will already have equipment to evaluate for a vasospasm.

For levels I, II, III and IV stroke centers, it is very likely the hospitals requesting to be said stroke centers will already have the equipment and ability to conduct laboratory analyses required for these stroke centers. Further, these analyses will



**be ultimately billed to the stroke patients so these costs will most likely be recovered by the hospitals.**

**For level I, II, III and IV stroke centers, it is likely that these hospitals already have a social worker providing support services in place, so this will not be a new cost for the stroke centers.**

**For level I, II and III stroke centers, it is likely that these hospitals already have a rehabilitation program in place, so this will not be a new cost for the stroke centers. Further, the rehabilitation services will be billed to the patient so that hospital will most likely recover these costs.**

**For level I and II stroke centers, it is likely the hospitals already have the required operating room equipment, so this will not be a new cost to the stroke centers. Further, some of this equipment will be billed to the stroke patient, so the stroke center will most likely be able to recover this cost.**

**It is very likely members on the stroke call roster are already going to be carrying a cell phone and beeper. Thus it is likely these charges in levels I, II, III and IV stroke centers won't be a new cost to the stroke center.**

FISCAL NOTE  
PRIVATE COST

- I. Department Title: Missouri Department of Health and Senior Services**  
**Division Title: Division of Regulation and Licensure**  
**Chapter Title: Chapter 40-Comprehensive Emergency Medical Services System**

<b>Rule Number and Name:</b>	<b>19 CSR 30-40.730 Standards for Stroke Center Designation.</b>
<b>Type of Rulemaking:</b>	<b>Proposed</b>

**II. SUMMARY OF FISCAL IMPACT**

Affected Agency or Political Subdivision	Estimated Cost of Compliance in the Aggregate
<b>148 private hospitals</b>	
<b>Level I Stroke Centers</b>	<b>\$113,240,552 for the first 4 year period and \$26,910,344 for annually thereafter</b>
<b>Level II Stroke Centers</b>	<b>\$104,904,142 for the first 4 year period and \$24,052,214 for annually thereafter</b>
<b>Level III Stroke Centers</b>	<b>\$102,149,400 for the first 4 year period and \$30,851,370 for annually thereafter</b>
<b>Level IV Stroke Centers</b>	<b>\$34,513,195 for the first 4 year period and \$10,690,830 for annually thereafter</b>
<b>Total</b>	<b>\$354,807,289 for the first 4 year period and \$92,504,758 for annually thereafter</b>

**III. WORKSHEET**

It is anticipated that most if not all of the stroke centers voluntarily applying to be designated as stroke centers will have the staff and equipment required to be the level of stroke center for which they are applying to be designated. However, the list of required staff and equipment has been detailed below, even if it is assumed the hospital currently meets these requirements.

**1. Level I stroke centers.****A. Salary Costs for medical professionals.**

- 1) A physician experienced in diagnosing and treating cerebrovascular disease - \$204,430 annually X one level I stroke center = \$204,430 X 4 years = \$817,720 for the first 4 year period and \$204,430 annually X one level I stroke center X 1 year = \$204,430 annually thereafter.**
- 2) At least one other health care professional or qualified individual credentialed in stroke patient care - \$126,046 annually X one level I**

- stroke center = \$126,046 X 4 years = \$504,184 for the first 4 year period and \$126,046 annually X one level I stroke center X 1 year = \$126,046 annually thereafter.
- 3) Neuro-interventional specialist/neurointerventionalist - \$195,000 annually X one level I stroke center for the first 4 year period = \$195,000 X 4 years = \$780,000 for the first 4 year period and \$195,000 X one level I stroke center X 1 year = \$195,000 annually thereafter.
  - 4) Other clinical staff as deemed necessary in the neurointerventional laboratory - \$59,750 annually X one level I stroke center = \$59,750 X 4 years = \$239,000 for the first 4 year period and \$59,750 annually X one level I stroke center X 1 year = \$59,750 annually thereafter.
  - 5) Stroke center medical director who is recommended to be a board certified or board admissible neurologist or other neuro-speciality trained physician - \$204,430 annually X one level I stroke center = \$204,430 X 4 years = \$817,720 for the first 4 year period and \$204,430 annually X one level I stroke center X 1 year = \$204,430 annually thereafter.
  - 6) Stroke program manager/coordinator who is a registered nurse or a qualified individual - \$126,046 annually X one level I stroke center = \$126,046 X 4 years = \$504,184 for the first 4 year period and \$126,046 annually X one level I stroke center X 1 year = \$126,046 annually thereafter.
  - 7) Physician with board certification in physical medicine and rehabilitation or by other properly trained individuals (e.g. neurologist experienced in stroke rehabilitation) to direct the stroke center's rehabilitation services - \$200,339 annually X one level I stroke center = \$200,339 X 4 years = \$801,356 for the first 4 year period and \$200,339 annually X one level I stroke center X 1 year = \$200,339 annually thereafter.
  - 8) Neurologist - \$204,430 annually X one level I stroke center = \$204,430 X 4 years = \$817,720 for the first 4 year period and \$204,430 X one level I stroke center X 1 year = \$204,430 annually thereafter.
  - 9) Neurosurgeon or surgeon approved by the chief of neurosurgery for care of stroke patients - \$468,766 annually X one level I stroke center = \$468,766 X 4 years = \$1,875,064 for the first 4 year period and \$468,766 annually X one level I stroke center X 1 year = \$468,766 annually thereafter.
  - 10) An internal medicine physician - \$181,823 annually X one level I stroke center = \$181,823 X 4 years = \$727,292 for the first 4 year period and \$181,823 annually X one level I stroke center X 1 year = \$181,823 annually thereafter.
  - 11) A diagnostic radiologist - \$402,539 annually X one level I stroke center = \$402,539 X 4 years = \$1,610,156 for the first 4 year period and \$402,539 annually X one level I stroke center X 1 year = \$402,539 annually thereafter.
  - 12) An anesthesiologist - \$331,932 annually X one level I stroke center for the first 4 year period = \$331,932 X 4 years = \$1,327,728 for the first four year period and \$331,932 annually X one level I stroke center X 1 year = \$331,932 annually thereafter.

- 13) Anesthesiology resident - \$61,000 annually X one level I stroke center = \$61,000 X 4 years = \$244,000 for the first 4 year period and \$61,000 annually X one level I stroke center X 1 year = \$61,000 annually thereafter.
- 14) Certified nurse anesthetists - \$155,095 annually X one level I stroke center = \$155,095 X 4 years = \$620,380 for the first year 4 year period and \$155,095 annually X one level I stroke center X 1 year = \$155,095 annually thereafter.
- 15) Anesthesia assistants - \$120,000 annually X one level I stroke center = \$120,000 X 4 years = \$480,000 for the first 4 year period and \$120,000 X one level I stroke center X 1 year = \$120,000 annually thereafter.
- 16) Emergency department physician credentialed for stroke care by the stroke center on staff 24 hours a day, 7 days a week - \$244,973 annually X 3 emergency department physicians X one level I stroke center = \$734,919 X 4 years = \$2,939,676 for the first year 4 year period and \$244,973 annually X 3 physicians X one level I stroke center X 1 year = \$734,919 annually thereafter.
- 17) Registered nurses in the emergency department - \$64,533 annually X 5 registered nurses in the emergency department X one level I stroke center = \$322,665 X 4 years = \$1,290,660 for the first 4 year period and \$322,665 X one level I stroke center X 1 year = \$322,665 annually thereafter.
- 18) Medical director of the emergency department - \$199,038 annually X one level I stroke center = \$199,038 X 4 years = \$796,152 for the first 4 year period and \$199,038 X one level I stroke center X 1 year = \$199,038 annually thereafter.
- 19) An intensive care unit medical director for stroke center intensive care unit - \$177,560 annually X one level I stroke center = \$177,560 X 4 years = \$710,240 for the first 4 year period and \$177,560 annually X one level I stroke center X 1 year = \$177,560 annually thereafter.
- 20) The stroke center intensive care unit shall have a physician on duty or available 24 hours a day 7 days a week - \$244,553 annually X 3 stroke center intensive care unit physicians X one level I stroke center = \$733,659 X 4 years = \$2,934,636 for the first 4 year period and \$244,553 annually X 3 stroke center intensive care unit physicians = \$733,659 annually X one level I stroke center X 1 year = \$733,659 annually thereafter.
- 21) The stroke center intensive care unit shall have a 1 to 1 or 1 to 2 registered nurse/patient ratio used for critically ill patients requiring intensive care unit level of care - \$67,623 annually X 5 registered nurses in the stroke center intensive care unit X one level I stroke center = \$338,115 X 4 years = \$1,352,460 for the first 4 year period and \$67,623 X 5 registered nurses = \$338,115 annually X one level I stroke center X 1 year = \$338,115 annually thereafter.
- 22) Stroke unit medical director - \$177,560 annually X one level I stroke center = \$177,560 X 4 years = \$710,240 for the first 4 year period and \$177,560 annually X one level I stroke center X 1 year = \$177,560 annually thereafter.
- 23) Physician on duty or available 24 hours a day, seven days a week in the stroke center stroke unit - \$177,560 annually X 3 physicians in the

stroke center stroke unit X one level I stroke center = \$532,680 X 4 years = \$2,130,720 for the first 4 year period and \$177,560 annually X 3 physicians = \$532,680 annually X one level I stroke center X 1 year = \$532,680 annually thereafter.

- 24) Stroke center stroke unit shall have registered nurses and other essential personnel on duty 24 hours a day 7 days a week - \$65,097 annually for the registered nurse X 4 registered nurses in the stroke center stroke unit X one level I stroke center = \$260,388 X 4 years = \$1,041,552 for the first 4 year period and \$65,097 X 4 registered nurses = \$260,388 annually X one level I stroke center X 1 year = \$260,388 annually thereafter.
- 25) Certified Nursing Technician - \$30,000 annually X one level I stroke center = \$30,000 X 4 years = \$120,000 for the first 4 year period and \$30,000 annually X one level I stroke center X 1 year = \$30,000 annually thereafter.
- 26) Magnetic resonance imaging technologist on call and available within 60 minutes, 24 hours a day, 7 days a week - \$59,750 annually X 4 magnetic resonance imaging technologists X one level I stroke center = \$239,000 X 4 years = \$956,000 for the first 4 year period and \$59,750 annually X 4 magnetic resonance imaging technologists = \$239,000 annually X one level I stroke center X 1 year = \$239,000 annually thereafter.
- 27) The stroke center post-anesthesia recovery room shall have registered nurses and other essential personnel on call and available within 60 minutes 24 hours a day 7 days a week - \$65,097 annually X 4 registered nurses X one level I stroke center = \$260,388 X 4 years = \$1,041,552 for the first 4 year period and \$65,097 X 4 registered nurses = \$260,388 annually X one level I stroke center X 1 year = \$260,388 annually thereafter.
- 28) Cerebroangiography technologist on call and available within 30 minutes for emergent procedure, on call and available within 60 minutes for routine procedures and available 24 hours a day, seven days a week - \$59,750 annually X 4 cerebroangiography technologists X one level I stroke center = \$239,000 X 4 years = \$956,000 for the first 4 year period and \$59,750 X 4 cerebroangiography technologists = \$239,000 annually X one level I stroke center X 1 year = \$239,000 annually thereafter.
- 29) Computerized tomography technologist - \$58,895 annually X 4 computerized tomography technologists X one level I stroke center = \$235,580 X 4 years = \$942,320 for the first 4 year period and \$58,895 X 4 computerized tomography technologists = \$235,580 X one level I stroke center X 1 year = \$235,580 annually thereafter.
- 30) Neurologist/radiologist - average \$300,000 annually X 3 neurologist/radiologists X one level I stroke center = \$900,000 X 4 years = \$3,600,000 for the first 4 year period and \$300,000 X 3 neurologists/radiologists = \$900,000 annually X one level I stroke center X 1 year = \$900,000 annually thereafter.
- 31) Floor nurse/radiology technician - average \$62,000 annually X one level I stroke center = \$62,000 X 4 years = \$248,000 for the first 4

- year period and \$62,000 annually X one level I stroke center X 1 year = \$62,000 annually thereafter.
- 32) Scrub nurse - \$68,655 annually X 4 scrub nurses X one level I stroke center = \$274,620 X 4 years = \$1,098,480 for the first 4 year period and \$68,655 X 4 scrub nurses = \$274,620 annually X one level I stroke center X 1 year = \$274,620 annually thereafter.
- 33) Nurse educator/supervisor to ensure staff are trained on core competencies - \$78,500 annually X one level I stroke center = \$78,500 X 4 years = \$314,000 for the first 4 year period and \$78,500 annually X one level I stroke center X 1 year = \$78,500 annually thereafter.

Total salary cost for medical professionals for one level I stroke center for the first year 4 year period - \$817,720 (#1 above) + \$504,184 (#2 above) + \$780,000 (#3 above) + \$239,000 (#4 above) + \$817,720 (#5 above) + \$504,184 (#6 above) + \$801,356 (#7 above) + \$817,720 (#8 above) + \$1,875,064 (#9 above) + \$727,292 (#10 above) + \$1,610,156 (#11 above) + \$1,327,728 (#12 above) + \$244,000 (#13 above) + \$620,380 (#14 above) + \$480,000 (#15 above) + \$2,939,676 (#16 above) + \$1,290,660 (#17 above) + \$796,152 (#18 above) + \$710,240 (#19 above) + \$2,934,636 (#20 above) + \$1,352,460 (#21 above) + \$710,240 (#22 above) + \$2,130,720 (#23 above) + \$1,041,552 (#24 above) + \$120,000 (#25 above) + \$956,000 (#26 above) + \$1,041,552 (#27 above) + \$956,000 (#28 above) + \$942,320 (#29 above) + \$3,600,000 (#30 above) + \$248,000 (#31 above) + \$1,098,480 (#32 above) + \$314,000 (#33 above) = \$35,349,192 for the first 4 year period.

Total salary cost for medical professionals for one level I stroke center for annually thereafter - \$204,430 (#1 above) + \$126,046 (#2 above) + \$195,000 (#3 above) + \$59,750 (#4 above) + \$204,430 (#5 above) + \$126,046 (#6 above) + \$200,339 (#7 above) + \$204,430 (#8 above) + \$468,766 (#9 above) + \$181,823 (#10 above) + \$402,539 (#11 above) + \$331,932 (#12 above) + \$61,000 (#13 above) + \$155,095 (#14 above) + \$120,000 (#15 above) + \$734,919 (#16 above) + \$322,665 (#17 above) + \$199,038 (#18 above) + \$177,560 (#19 above) + \$733,659 (#20 above) + \$338,115 (#21 above) + \$177,560 (#22 above) + \$532,680 (#23 above) + \$260,388 (#24 above) + \$30,000 (#25 above) + \$239,000 (#26 above) + \$260,388 (#27 above) + \$239,000 (#28 above) + \$235,580 (#29 above) + \$900,000 (#30 above) + \$62,000 (#31 above) + \$274,620 (#32 above) + \$78,500 (#33 above) = \$8,837,298 for annually thereafter.

**B. Continuing education costs for level I stroke center staff.**

- 1) Level I core team members of the stroke call roster shall complete a minimum of 10 hours of continuing education in cerebrovascular disease every year – average of \$10.00 per hour for online training X 10 hours = \$100 X one level I stroke center = \$100 X 4 years = \$400 for the first 4 year period and \$100 X one level I stroke center X 1 year = \$100 annually thereafter.

- 2) Level I core team member of the stroke call roster shall complete a minimum of 10 hours of continuing education in cerebrovascular disease every year – average of \$39.99 annually for online training-  $\$39.99 \times \text{one level I stroke center} = \$39.99 \times 4 \text{ years} = \$159.96$  for the first 4 year period and  $\$39.99 \times \text{one level I stroke center} \times 1 \text{ year} = \$39.99$  annually thereafter.
- 3) Level I stroke call roster member (emergency department physician) shall complete a minimum average of 10 hours of continuing education in cerebrovascular disease every year - average of \$10.00 per hour for online training  $\times 10 \text{ hours} \times \text{one level I stroke center} = \$100 \times 4 \text{ years} = \$400$  for the first 4 year period and  $\$100 \times \text{one level I stroke center} \times 1 \text{ year} = \$100$  annually thereafter.
- 4) Level I stroke call roster member (neurointerventionalist) shall complete a minimum average of 10 hours of continuing education in cerebrovascular disease every year - average of \$10.00 per hour for online training  $\times 10 \text{ hours} \times \text{one level I stroke center} = \$100 \times 4 \text{ years} = \$400$  for the first 4 year period and  $\$100 \times \text{one level I stroke center} \times 1 \text{ year} = \$100$  annually thereafter.
- 5) Level I stroke call roster member (a neurologist) shall complete a minimum average of 10 hours of continuing education in cerebrovascular disease every year - average of \$10.00 per hour for online training  $\times 10 \text{ hours} \times \text{one level I stroke center}$  for the first 4 year period  $= \$100 \times 4 \text{ years} = \$400$  for the first 4 year period and  $\$100 \times \text{one level I stroke center} \times 1 \text{ year} = \$100$  annually thereafter.
- 6) Level I stroke call roster member (others as appropriate) shall complete a minimum average of 10 hours of continuing education in cerebrovascular disease every year - average of \$10.00 per hour for online training  $\times 10 \text{ hours} \times \text{one level I stroke center} = \$100$  annually  $\times 3 \text{ others as appropriate} = \$300 \times 4 \text{ years} = \$1,200$  for the first 4 year period and  $\$300 \times \text{one level I stroke center} \times 1 \text{ year} = \$300$  annually thereafter.
- 7) A level I stroke center medical director shall complete a minimum of 12 hours of continuing medical education every year in the area of cerebrovascular disease - average of \$10.00 per hour for online training  $\times 12 \text{ hours} \times \text{one level I stroke center} = \$120 \times 4 \text{ years} = \$480$  for the first 4 year period and  $\$120 \times \text{one level I stroke center} \times 1 \text{ year} = \$120$  annually thereafter.
- 8) A level I program manager/coordinator shall complete a minimum of 10 hours of continuing education every year in cerebrovascular disease - average of \$39.99 annually for online training  $= \$39.99 \times \text{one level I stroke center} = \$39.99 \times 4 \text{ years} = \$159.96$  for the first 4 year period and  $\$39.99 \times \text{one level I stroke center} \times 1 \text{ year} = \$39.99$  annually thereafter.
- 9) Emergency department physicians in level I stroke centers shall complete a minimum average of 4 hours of continuing medical education in cerebrovascular disease every year - average of \$10.00 per hour for online training  $\times 3 \text{ physicians in the emergency room} \times 4 \text{ hours} \times \text{one level I stroke center} = \$120 \times 4 \text{ years} = \$480$  for the first 4 year period and  $\$10.00 \times 3 \text{ physicians} \times 4 \text{ hours} \times \text{one level I stroke center} \times 1 \text{ year} = \$120$  annually thereafter.

- 10) Registered nurses assigned to the emergency departments in level I stroke centers shall complete a minimum of 4 hours of continuing education in the area of cerebrovascular disease every year - average of \$39.99 annually for online training = \$39.99 X 5 registered nurses in the emergency room X one level I stroke center X 4 years = \$799.80 for the first 4 year period and \$39.99 X 5 registered nurses in the emergency room X one level I stroke center X 1 year = \$199.95 annually thereafter.
- 11) Registered nurses assigned to the intensive care unit in level I stroke centers who care for stroke patients shall complete a minimum of 10 hours of continuing education in the area of cerebrovascular disease every year - average of \$39.99 annually for online training X 5 registered nurses in the intensive care unit X one level I stroke center X 4 years = \$799.80 for the first 4 year period and \$39.99 annually X 5 registered nurses in the intensive care unit X one level I stroke center X 1 year = \$199.95 annually thereafter.
- 12) Stroke unit registered nurses in level I stroke centers shall complete a minimum of 10 hours of continuing education in the area of cerebrovascular disease every year - average of \$39.99 annually X 4 stroke unit registered nurses X one level I stroke center X 4 years = \$639.84 for the first 4 year period and \$39.99 X 4 registered nurses X one level I stroke center X 1 year = \$159.96 annually thereafter.

Total cost for continuing education for medical staff of one level I stroke center for the first year 4 year period - \$400 (#1 above) + \$159.96 (#2 above) + \$400 (#3 above) + \$400 (#4 above) + \$400 (#5 above) + \$1,200 (#6 above) + \$480 (#7 above) + \$159.96 (#8 above) + \$480 (#9 above) + \$799.80 (#10 above) + \$799.80 (#11 above) + \$639.84 (#12 above) = \$6,319.36 for the first 4 year period.

Total cost for continuing education for medical staff of one level I stroke center for annually thereafter - \$100 (#1 above) + \$39.99 (#2 above) + \$100 (#3 above) + \$100 (#4 above) + \$100 (#5 above) + \$300 (#6 above) + \$120 (#7 above) + \$39.99 (#8 above) + \$120 (#9 above) + \$199.95 (#10 above) + \$199.95 (#11 above) + \$159.96 (#12 above) = \$1,579.84 for annually thereafter.

### C. Medical Equipment.

- 1) Electronic communication devices for stroke call roster members - 2 electronic communication devices (cell phone and beeper) X \$300 for the annual cost of each electronic communication device X 2 stroke call roster members (1 on call member and one back-up member) carrying this device X one level I stroke center X 4 years = \$4,800 for the first 4 year period and 2 electronic communication devices (cell phone and beeper) X \$300 for the annual cost of each electronic communication device X 2 stroke call roster members carrying this device (1 on call member and one back-up member) X one level I stroke center X 1 year = \$1,200 annually thereafter.



- 2) Resuscitation equipment for the neuro-interventional laboratory –a)
- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level I stroke center = \$600 X 4 years = \$2,400 for the first 4 year period and at least 2 X \$300 each X one level I stroke center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 packs X one level I stroke center = \$12,500 X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 packs X one level I stroke center X 1 year = \$12,500 annually thereafter.
  - c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs X one level I stroke center = \$12,500 X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 packs X one level I stroke center X 1 year = \$12,500 annually thereafter.
  - d) Sources of oxygen - (air outlet \$70 X 7 = \$490 for the first year for one level I stroke center + \$150 per year X 3 years for upkeep and maintenance of air outlets for one level I stroke center = \$450 for a total of \$940 for air outlets) + (regulator for air outlet \$35 X 25 = \$875 X 4 years for one level I stroke center = \$3,500) + (nasal cannula \$.40 X 500 patients = \$200 X 4 years for one level I stroke center = \$800) + (masks \$2.40 X 500 patients = \$1200 X 4 years for one level I stroke center = \$4,800) + (ambu bags \$10.50 X 100 = \$1050 X 4 years for one level I stroke center = \$4,200) + (oxygen tank \$70 X 300 = \$21,000 X 4 years for one level I stroke center = \$84,000) + (regulator for oxygen tank \$30 X 25 = \$750 X 4 years for one level I stroke center = \$3,000) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X 4 years for one level I stroke center = \$800) = for a total of \$102,040 for the first 4 year period and (annual air outlet upkeep and maintenance for one level I stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level I stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 1 year = \$200) + (masks \$2.40 X 500 = \$1200 X one level I stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 1 year = \$200 for a total of \$25,425 annually thereafter.
  - e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 250 = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period and suction devices canister and tubing for wall suction \$50 X 250 = \$12,500 X one level I stroke center X 1 year = \$12,500 annually thereafter.
  - f) Telemetry - average of \$800 per patient X 500 patients = \$400,000 X one level I stroke center = \$400,000 X 4 years = \$1,600,000 for the first 4 year period and \$800 per patient X 500 patients = \$400,000 X one level I stroke center X 1 year = \$400,000 annually thereafter.

- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level I stroke center = \$37,895 X one year (the first year) = \$37,895 + \$1,500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for the first 4 year period and \$1,500 for the upkeep and maintenance of a electrocardiograph, cardiac monitor and defibrillator for one level I stroke center X 1 year = \$1,500 annually thereafter.
- h) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000) = \$6,000 X one level I stroke center X 4 years = \$24,000 for the first 4 year period and \$6,000 X one level I stroke center X 1 year = \$6,000 annually thereafter.
- i) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium and sulfate \$100 per patient X 100 patients = \$10,000 X one level I stroke center X 4 years = \$40,000 for the first 4 year period and saline, epinephrine, atropine, lidocaine, magnesium and sulfate \$100 per patient X 100 patients = \$10,000 X one level I stroke center X 1 year = \$10,000 annually thereafter.
- j) Supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center = \$3,000 X 4 years = \$12,000 for the first 4 year period and supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center X 1 year = \$3,000 annually thereafter.

Total costs for resuscitation equipment for one level I stroke center for the neuro-interventional laboratory for the first 4 year period - \$2,400 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$102,040 (letter d above) + \$50,000 (letter e above) + \$1,600,000 (letter f above) + \$42,395 (letter g above) + \$24,000 (letter h above) + \$40,000 (letter i above) + \$12,000 (letter j above) = \$1,972,835 for the first 4 year period.

Total costs for resuscitation equipment for one level I stroke center for the neuro-interventional laboratory for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,425 (letter d above) + \$12,500 (letter e above) + \$400,000 (letter f above) + \$1,500 (letter g above) + \$6,000 (letter h above) + \$10,000 (letter i above) + \$3,000 (letter j above) = \$484,025 annually thereafter.

### 3) Resuscitation equipment for the emergency department -

- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level I stroke center = \$600 X 4 years = \$2,400 for the first 4 year period and at least 2 X \$300 each = \$600 X one level I stroke center = \$600 annually thereafter.
- b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 1 year = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 1 year = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 for the first year for one level I stroke center + \$150 per year X 3 years for upkeep and maintenance of air outlets for one level I stroke center = \$450 for a total of \$940 for air outlets) + (nasal cannula \$.40 X 500 patients = \$200 X 4 years for one level I stroke center = \$800) + (masks \$2.40 X 500 patients = \$1,200 X 4 years for one level I stroke center = \$4,800) + (ambu bags \$10.50 X 100 = \$1,050 X 4 years for one level I stroke center = \$4,200) + (oxygen tank \$70 X 300 = \$21,000 X 4 years for one level I stroke center = \$84,000) + (regulator for oxygen tank \$30 X 25 = \$750 X 4 years for one level I stroke center = \$3,000) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X 4 years for one level I stroke center = \$800) for a total of \$98,540 for the first 4 year period and (air outlet upkeep and maintenance \$150 X one level I stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 15 X one level I stroke center X 1 year = \$525) + (nasal cannula \$.40 X 500 patients X one level I stroke center X 1 year = \$200) + (masks \$2.40 X 500 X one level I stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 X one level I stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 X one level I stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 X one level I stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients X one level I stroke center X 1 year = \$200) for a total of \$25,075 annually thereafter.
- e) Mechanical ventilator - \$7000 X one level I stroke center = \$7000 for the first year and \$1,500 for the annual upkeep and maintenance in the future of one level I stroke center X 3 years = \$4,500 for 3 years for a total of \$11,500 for the first 4 year period and \$1,500 for the upkeep and maintenance for one level I stroke center X 1 year = \$1,500 annually thereafter.
- f) Suction devices - suction device canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I stroke center = \$25,000 X 4 years = \$100,000 for the first 4 year period and \$50 X 500 patients X one level I stroke center X 1 year = \$25,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 for the cost of the first year and \$1,500 for the annual upkeep and maintenance of one level I stroke center X 3 years = \$4,500 for a total of \$42,395 for the first 4 year period and \$1,500 for upkeep

- and maintenance X one level I stroke center X 1 year = \$1,500 annually thereafter.
- h) Central line insertion equipment - \$600 X 300 patients = \$180,000 X one level I stroke center = \$180,000 X 4 years = \$720,000 for the first 4 year period and \$600 X 300 patients = \$180,000 X one level I stroke center X 1 year = \$180,000 annually thereafter.
  - i) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 = \$2,000) = \$6,000 X one level I stroke center = \$6,000 X 4 years = \$24,000 for the first 4 year period and \$6,000 X one level I stroke center = \$6,000 annually thereafter.
  - j) Intraosseous devices - needles \$25 each X 300 patients = \$7,500 X one level I stroke center = \$7,500 X 4 years = \$30,000 for the first 4 year period and \$25 each X 300 patients = \$7,500 X one level I stroke center = \$7,500 annually thereafter.
  - k) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 = \$50,000 X one level I stroke center = \$50,000 X 4 years = \$200,000 for the first 4 year period and \$100 X 500 = \$50,000 X one level I stroke center = \$50,000 annually thereafter.
  - l) Two-way communication link with emergency medical service vehicles - \$1,200 apiece X one level I stroke center = \$1,200 for the first year + \$200 for upkeep and maintenance for one level I stroke center X 3 years = \$600 for a total of \$1,800 for the first 4 year period and \$200 for upkeep and maintenance for one level I stroke center = \$200 annually thereafter.
  - m) End-tidal carbon dioxide monitor - \$3,900 X one level I stroke center = \$3,900 for the first year and \$1,500 for the annual upkeep and maintenance for one level I stroke center X 3 years = \$4,500 for a total of \$8,400 for the first 4 year period and \$1,500 for the annual upkeep and maintenance for one level I stroke center X one level I stroke center = \$1,500 annually thereafter.
  - n) Temperature control devices for patient and resuscitation fluids - \$270 pack of 10 (Bair Hugger Therapy) X 30 = \$8,100 X one level I stroke center X 4 years = \$32,400 for the first 4 year period and \$270 pack of 10 (Bair Hugger Therapy) X 30 = \$8,100 X one level I stroke center = \$8,100 annually thereafter.
  - o) Supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center = \$3,000 X 4 years = \$12,000 for the first 4 year period and supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center X 1 year = \$3,000 annually thereafter.

Total costs for resuscitation equipment for one level I stroke center for the emergency room department for the first 4 year period - \$2,400 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$98,540 (letter d above) + \$11,500 (letter e above) + \$100,000 (letter f above) + \$42,395 (letter g above) + \$720,000 (letter h above) + \$24,000 (letter i above) + \$30,000 (letter j above) + \$200,000 (letter k above) + \$1,800 (letter l above) + \$8,400 (letter m above) + \$32,400 (letter n above) + \$12,000 (letter o above) = \$1,383,435 for the first 4 year period.

Total costs for resuscitation equipment for one level I stroke center for the emergency room department for the first 4 year period for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,075 (letter d above) + \$1,500 (letter e above) + \$25,000 (letter f above) + \$1,500 (letter g above) + \$180,000 (letter h above) + \$6,000 (letter i above) + \$7,500 (letter j above) + \$50,000 (letter k above) + \$200 (letter l above) + \$1,500 (letter m above) + \$8,100 (letter n above) + \$3,000 (letter o above) = \$334,975 for annually thereafter.

- 4) Resuscitation equipment for the intensive care unit -
- a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes, bag-mask resuscitator and a mechanical ventilator - (laryngoscopes at least 2 X \$300 each = \$600 X 4 years X one level I stroke center = \$2,400 for the first 4 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 packs = \$12,500 X 4 years X one level I stroke center = \$50,000 for the first 4 year period) + (bag-mask resuscitator \$250 for a pack of 10 X 50 packs X 4 years X one level I stroke center = \$50,000 for the first 4 year period) + (mechanical ventilator \$7000 X one level I stroke center X 1 year (the first year) + \$1,500 for the upkeep and maintenance of ventilator X 3 years (years 2 through 4) X one level I stroke center = \$4,500 for a total of \$11,500 for the first 4 year period) = for a total of \$113,900 for the first 4 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level I stroke center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 packs X 1 year = \$12,500 X one level I stroke center X 1 year = \$12,500) + (bag-mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 1 year = \$12,500) + (mechanical ventilator \$1500 for upkeep and maintenance X one level I stroke center X 1 year = \$1500) = for a total of \$27,100 annually thereafter.
  - b) Oxygen source with concentration controls - (air outlet \$70 X 7 = \$490 X one level I stroke center X 1 year (the first year) = \$490 + \$150 for upkeep and maintenance of air outlets X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator \$35 X 25 = \$875 X 4 years X one level I stroke center = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 = \$200 X 4 years X one level I stroke center = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X 4 years X

one level I stroke center = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1,050 X 4 years X one level I stroke center = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X 4 years X one level I stroke center = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 4 years X one level I stroke center = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X 4 years X one level I stroke center = \$800 for the first 4 year period) for a total of \$102,040 for the first 4 year period and (air outlet upkeep and maintenance = \$150 X one level I stroke center X one year = \$150) + (regulator \$35 X 25 = \$875 X one level I stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 = \$200 X one level I stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 x one level I stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center = \$200) for a total of \$25,425 annually thereafter.

- c) Cardiac emergency cart, including medications - \$1600 cart + medications and suction devices \$1000 = \$2,600 X one level I stroke center X 1 year (the first year) = \$2,600 + \$1,000 medications X 3 years (years 2 through 4) = \$3,000 for a total of \$5,600 for the first 4 year period and \$1,000 medications and suction devices X one level I stroke center X 1 year = \$1,000 annually thereafter.
- d) Telemetry, electrocardiograph capability, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X 4 years X one level I stroke center X 1 year = \$1,600,000) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X 1 year (first year) X one level I stroke center = \$37,895 + \$1,500 X 3 years (years 2 through 4) X one level I stroke center = \$4,500 for a total of \$42,395) for a total of \$1,642,395 for the first 4 year period and (telemetry \$800 X 500 patients = \$400,000 X one level I stroke center X 1 year = \$400,000) + (\$1,500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level I stroke center X 1 year = \$1,500) for a total of \$401,500 for one level I stroke center annually thereafter.
- e) Electronic pressure monitoring and pulse oximetry - (electronic pressure monitoring devices \$100 X 25 = \$2,500 X 4 years X one level I stroke center = \$10,000) + (pulse oximetry devices \$100 X 25 = \$2,500 X 4 years X one level I stroke center = \$10,000) for a total of \$20,000 for the first 4 year period and electronic pressure monitoring devices \$100 X 25 X one level I stroke center X 1 year = \$2,500 + pulse oximetry devices \$100 X 25 X one level I stroke center X 1 year = \$2,500 for a total of \$5,000 annually thereafter.
- f) End-tidal carbon dioxide monitor - \$3,900 X one level I stroke center X 1 year (first year) = \$3,900 for the first year + \$1,500 for annual upkeep and maintenance X one level I stroke center X 3

- years (years 2 through 4) = \$4,500 for a total of \$8,400 for the first 4 year period and \$1,500 X one level I stroke center X 1 year = \$1,500 annually thereafter.
- g) Patient weight devices - \$1000 X one level I stroke center X 1 year = \$1,000 (the first year) + \$250 annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$750 for a total of \$1,750 for the first 4 year period and \$250 X one level I stroke center X 1 year = \$250 annually thereafter.
- h) Intravenous fluids - (drugs are already accounted for in letter c above) (all standard intravenous fluids \$4.00 each X 500 patients = \$2,000 X 4 years X one level I stroke center = \$8,000) + (all standard administration devices \$4.00 each X 500 patients = \$2,000 X 4 years X one level I stroke center = \$8,000) + (all standard intravenous catheters \$4.00 each X 500 patients = \$2,000 X 4 years X one level I stroke center = \$8,000) for a total of \$24,000 for the first 4 year period and (all standard intravenous fluids \$4.00 each X 500 patients X 1 year X one level I stroke center = \$2,000 ) + (all standard administration devices \$4.00 each X 500 patients X 1 year X one level I stroke center = \$2,000) + (all standard intravenous catheters \$4.00 each X 500 patients X 1 year X one level I stroke center = \$2,000) for a total of \$6,000 annually thereafter.
- i) Intracranial pressure monitoring devices - digital \$13,000 X one level I stroke center X 1 year (the first year) = \$13,000 for the first year + \$1,500 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$17,500 for the first 4 year period and \$1,500 for annual upkeep and maintenance X one level I stroke center X 1 year = \$1,500 annually thereafter.
- j) Supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center = \$3,000 X 4 years = \$12,000 for the first 4 year period and supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center X 1 year = \$3,000 annually thereafter.

Total costs for resuscitation equipment for one level I stroke center for the intensive care unit for the first 4 year period - \$113,900 (letter a above) + \$102,040 (letter b above) + \$5,600 (letter c above) + \$1,642,395 (letter d above) + \$20,000 (letter e above) + \$8,400 (letter f above) + \$1,750 (letter g above) + \$24,000 (letter h above) + \$17,500 (letter i above) + \$12,000 (letter j above) = \$1,947,585 for the first 4 year period.

Total costs for resuscitation equipment for one level I stroke center for the intensive care unit for annually thereafter - \$27,100 (letter a above) + \$25,425 (letter b above) + \$1,000 (letter c above) + \$401,500 (letter d above) + \$5,000 (letter e above) + \$1,500 (letter

f above) + \$250 (letter g above) + \$6,000 (letter h above) + \$1,500 (letter i above) + \$3,000 (letter j above) = \$472,275 for annually thereafter.

**5) Stroke center stroke unit resuscitation equipment -**

- a) Airway control and ventilation equipment including**  
laryngoscopes, endotracheal tubes of all sizes - (laryngoscopes at least 2 X \$300 each = \$600 X one level I stroke center X 4 years = \$2,400 for the first 4 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period) + (mechanical ventilator \$7000 X one level I stroke center X 1 year (the first year) + \$1,500 for annual upkeep and maintenance of ventilator X one level I stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$11,500) for a total of \$63,900 for the first 4 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level I stroke center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I stroke center X 1 year = \$12,500) + (mechanical ventilator \$1,500 annual upkeep and maintenance X one level I stroke center X 1 year = \$1,500) for a total of \$14,600 annually thereafter.
- b) Bag-mask resuscitator and sources of oxygen -** (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period) + (air outlet \$70 X 7 = \$490 X one level I stroke center X 1 year (the first year) + \$150 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level I stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level I stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 4 years = \$800 for the first 4 year period) for a total of \$152,040 for the first 4 year period and (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 1 year = \$12,500) + (air outlet \$150 for annual upkeep and maintenance X one level I stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level I stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I



- stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 1 year = \$200) for a total of \$37,925 annually thereafter.
- c) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I stroke center X 4 years = \$100,000 for the first 4 year period and \$25,000 X one level I stroke center = \$25,000 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X one level I stroke center X 4 years = \$1,600,000 for the first 4 year period) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X one level I stroke center X 1 year (the first year) + \$1,500 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for the first 4 year period) for a total of \$1,642,395 for the first 4 year period and (telemetry \$800 X 500 patients = \$400,000 X one level I stroke center X 1 year = \$400,000) + (\$1,500 for annual upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level I stroke center X 1 year = \$1,500) for a total of \$401,500 annually thereafter.
- e) All standard intravenous fluids and administration devices and intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period) for a total of \$24,000 for the first 4 year period (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I stroke center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I stroke center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I stroke center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- f) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 100 patients = \$10,000 X one level I stroke center X 4 years = \$40,000 for the first 4 year period and \$10,000 X one level I stroke center X 1 year = \$10,000 annually thereafter.
- g) Supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center = \$3,000 X 4 years = \$12,000 for the first 4 year period and supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center X 1 year = \$3,000 annually thereafter.

Total cost for resuscitation equipment for one level I stroke center stroke unit for the first 4 year period - \$63,900 (letter a above) + \$152,040 (letter b above) + \$100,000 (letter c above) + \$1,642,395 (letter d above) + \$24,000 (letter e above) + \$40,000 (letter f above) + \$12,000 (letter g above) = \$2,034,335 for the first 4 year period.

Total cost for resuscitation equipment for one level I stroke center stroke unit for annually thereafter - \$14,600 (letter a above) + \$37,925 (letter b above) + \$25,000 (letter c above) + \$401,500 (letter d above) + \$6,000 (letter e above) + \$10,000 (letter f above) + \$3,000 (letter g above) = \$498,025 annually thereafter.

- 6) Angiography with interventional capability available 24 hours a day, 7 days a week, in-house computerized tomography, computerized tomography perfusion, computerized tomography angiography - \$1,000,000 average for computerized tomography (CT) machine with these capabilities = \$1,000,000 X one level I stroke center X 1 year (the first year) = \$1,000,000 for the first year + \$200,000 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$600,000 for a total of \$1,600,000 for the first 4 year period and \$200,000 for annual upkeep and maintenance X one level I stroke center X 1 year = \$200,000 annually thereafter.
- 7) Magnetic resonance imaging, magnetic resonance angiogram/magnetic resonance venography - average cost \$2,000,000 for MRI machine with these capabilities = \$2,000,000 X one level I stroke center X 1 year (the first year) = \$2,000,000 for the first year + \$400,000 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$1,200,000 for a total of \$3,200,000 for the first 4 year period and \$400,000 for annual upkeep and maintenance X one level I stroke center X 1 year = \$400,000 annually thereafter.
- 8) Extra cranial ultrasound, trans thoracic echo and trans esophageal echo-average \$35,000 for ultrasound machine - \$35,000 X one level I stroke center X 1 year (the first year) = \$35,000 for the first year + \$2,000 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$6,000 = for a total of \$41,000 for the first 4 year period and \$2,000 for annual upkeep and maintenance X one level I stroke center X 1 year = \$2,000 annually thereafter.
- 9) Equipment to evaluate for vasospasm - \$6,000 X one level I stroke center X 1 year (the first year) = \$6,000 for the first year + \$750.00 for upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$2,250 for a total of \$8,250 for the first 4 year period and \$750.00 for upkeep and maintenance X one level I stroke center X 1 year = \$750.00 annually thereafter.

- 10) Resuscitation equipment for the radiology department-

- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level I stroke center X 4 years = \$2,400 for the first 4 year period and at least 2 X \$300 each = \$600 X one level I stroke center X 1 year = \$600 annually thereafter.
- b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 X one level I stroke center X 1 year = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 packs X one level I stroke center = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level I stroke center X 1 year (the first year) = \$490 for the first year + \$150 annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level I stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level I stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 4 years = \$800 for the first 4 year period) for a total of \$102,040 for the first 4 year period and (air outlet \$70 X 7 = \$490 X one level I stroke center X 1 year = \$490) + (regulator for air outlet \$35 X 25 = \$875 X one level I stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 1 year = \$200) for a total of \$25,765 for annually thereafter.
- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I stroke center X 4 years = \$100,000 for the first 4 year period and \$50 X 500 X one level I stroke center X 1 year = \$25,000 annually thereafter.
- f) Telemetry - average of \$800 X 500 patients = \$400,000 X one level I stroke center X 4 years = \$1,600,000 for the first year

period and \$800 X 500 patients X one level I stroke center X 1 year = \$400,000 annually thereafter.

- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level I stroke center = \$37,895 X one level I stroke center X 1 year (first year) = \$37,895 for the first year + \$1,500 for the annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for the first 4 year period and \$1,500 for the annual upkeep and maintenance X one level I stroke center X 1 year = \$1,500 for annually thereafter.
- h) All standard administration devices - \$4.00 each X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period and \$2,000 X one level I stroke center X 1 year = \$2,000 annually thereafter.
- i) All standard intravenous catheters - \$4.00 each X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period and \$2,000 X one level I stroke center X 1 year = \$2,000 annually thereafter.
- j) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level I stroke center X 4 years = \$200,000 for the first 4 year period and \$50,000 X one level I stroke center X 1 year = \$50,000 annually thereafter.
- k) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level I stroke center X 4 years = \$100,000 for the first 4 year period and \$25,000 X one level I stroke center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level I stroke center for the radiology department for the first 4 year period - \$2,400 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$102,040 (letter d above) + \$100,000 (letter e above) + \$1,600,000 (letter f above) + \$42,395 (letter g above) + \$8,000 (letter h above) + \$8,000 (letter i above) + \$200,000 (letter j above) + \$100,000 (letter k above) = \$2,262,835 for the first 4 year period.

Total cost for resuscitation equipment for one level I stroke center for the radiology department for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,765 (letter d above) + \$25,000 (letter e above) + \$400,000 (letter f above) + \$1,500 (letter g above) + \$2,000 (letter h above) + \$2,000 (letter i above) + \$50,000 (letter j above) + \$25,000 (letter k above) = \$556,865 for annually thereafter.

**11) Operating rooms shall have at least the following equipment:**

- a) Operating microscope - \$15,000 X one level I stroke center X 1 year (first year) = \$15,000 for the first year + \$1,500 for annual upkeep and maintenance X one level I stroke center X 3 years

(years 2 through 4) = \$4,500 for a total of \$19,500 for the first 4 year period and \$1,500 for annual upkeep, repair and maintenance X one level I stroke center X 1 year = \$1,500 annually thereafter.

- b) Thermal control equipment for patient and resuscitation fluids - (temperature control devices \$2,750 each X 2 = \$5,500 X one level I stroke center X 1 year (the first year) = for a total of \$5,500 for the first year + \$2,750 X 1 = \$2,750 for replacement X 3 years X one level I stroke center = \$8,250 for a total of \$13,750 for the first 4 year period ) + (blankets \$270 pack of 10 X 50 = \$13,500 X one level I stroke center X 4 years = \$54,000 for the first 4 year period) + (resuscitation fluids \$50 X 500 patients = \$25,000 X one level I stroke center X 4 years = \$100,000 for the first 4 year period) for a total of \$167,750 for the first 4 year period and (temperature control devices \$2,750 each X 1 X 1 year = \$2,750 for replacement X one level I stroke center = \$2,750) + (blankets \$270 pack of 10 X 50 = \$13,500 X one level I stroke center X 1 year = \$13,500) + (resuscitation fluids \$50 X 500 patients = \$25,000 X one level I stroke center = \$25,000) for a total of \$41,250 for annually thereafter.
- c) Instruments necessary to perform an open craniotomy - \$1,500 X one level I stroke center X 4 years = \$6,000 for the first 4 year period and \$1500 X one level I stroke center X 1 year = \$1,500 annually thereafter.
- d) Monitoring equipment - \$4,000 X one level I stroke center X 1 year (the first year) = \$4,000 for the first year + \$500 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4 = \$1,500 for a total of \$5,500 for the first 4 year period and \$500 for annual upkeep and maintenance X one level I stroke center X 1 year = \$500 annually thereafter.

Total cost for operating room equipment for one level I stroke center for the first 4 year period - \$19,500 (letter a above) + \$167,750 (letter b above) + \$6,000 (letter c above) + \$5,500 (letter d above) = \$198,750 for the first 4 year period.

Total cost for operating room equipment for one level I stroke center for annually thereafter - \$1,500 (letter a above) + \$41,250 (letter b above) + \$1,500 (letter c above) + \$500 (letter d above) = \$44,750 for annually thereafter.

12) Resuscitation equipment available to the operating room-

- a.) Laryngoscopes - at least 2 X \$300 each = \$600 X one level I stroke center X 4 years = \$2,400 for the first 4 year period and \$600 X one level I stroke center X 1 year = \$600 annually thereafter.
- b.) Endotracheal tubes of all sizes - 250 for a pack of 10 X 50 = \$12,500 X one level I stroke center X 4 years = \$50,000 for the

- first 4 year period and \$12,500 X one level I stroke center X 1 year = \$12,500 annually thereafter.
- c.) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period and \$12,500 X one level I stroke center X 1 year = \$12,500 annually thereafter.
- d.) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level I stroke center X 1 year (the first year) = \$490 for the first year + air outlet annual upkeep and maintenance \$150 X one level I stroke center X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level I stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level I stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 4 years = \$800 for the first 4 year period) for a total of \$102,040 for the first 4 year period and (air outlet annual upkeep and maintenance \$150 X one level I stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level I stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 1 year = \$200) for a total of \$25,425 annually thereafter.
- e.) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I stroke center X 4 years = \$100,000 for the first 4 year period and \$25,000 X one level I stroke center X 1 year = \$25,000 annually thereafter.
- f.) Telemetry - average of \$800 X 500 patients = \$400,000 X one level I stroke center X 4 years = \$1,600,000 for the first 4 year period and \$400,000 X one level I stroke center X 1 year = \$400,000 annually thereafter.
- g.) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level I stroke center X 1 year (the first year) = \$37,895 + \$1,500 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for the first 4 year period and \$1,500 for the annual upkeep and

maintenance X one level I stroke center X 1 year = \$1,500 annually thereafter.

- h) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period) for a total of \$24,000 for the first 4 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I stroke center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I stroke center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I stroke center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- i) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level I stroke center X 4 years = \$200,000 for the first 4 year period and \$100 X 500 patients X one level I stroke center X 1 year = \$50,000 annually thereafter.
- j.) Supplies necessary for emergency care (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level I stroke center X 4 years = \$100,000 for the first 4 year period and \$50 X 500 patients = \$25,000 X one level I stroke center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level I stroke center for the operating room for the first 4 year period - \$2,400 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$102,040 (letter d above) + \$100,000 (letter e above) + \$1,600,000 (letter f above) + \$42,395 (letter g above) + \$24,000 (letter h above) + \$200,000 (letter i above) + \$100,000 (letter j above) = \$2,270,835 for the first 4 year period.

Total cost for resuscitation equipment for one level I stroke center for the operating room for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,425 (letter d above) + \$25,000 (letter e above) + \$400,000 (letter f above) + \$1,500 (letter g above) + \$6,000 (letter h above) + \$50,000 (letter i above) + \$25,000 (letter j above) = \$558,525 annually thereafter.

- 13) Resuscitation equipment for the Post-Anesthesia Recovery room (PAR)-
  - a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes, bag-mask

resuscitator, sources of oxygen and a mechanical ventilator - (laryngoscopes at least 2 X \$300 each = \$600 X one level I stroke center X 4 years = \$2,400 for the first 4 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period) + (bag-mask resuscitator \$250 for a pack of 10 X 50 = \$12,500 X one level I stroke center X 4 years = \$50,000 for the first 4 year period) + (mechanical ventilator \$7000 X one level I stroke center X 1 year (the first year) = \$7,000 + \$1,500 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$11,500 for the first 4 year period) + (air outlet \$70 X 7 = \$490 X one level I stroke center X 1 year (the first year) = \$490 + \$150 for annual upkeep and maintenance X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator \$35 X 25 = \$875 X one level I stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 patients = \$1,050 X one level I stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 4 years = \$800 for the first 4 year period) for a total of \$215,940 for the first 4 year period and (laryngoscopes at least two X \$300 each = \$600 X one level I stroke center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I stroke center X 1 year = \$12,500) + (bag-mask resuscitator \$250 for a pack of 10 X 50 = \$12,500 X one level I stroke center X 1 year = \$12,500) + (mechanical ventilator \$1,500 for annual upkeep and maintenance X one level I stroke center X 1 year = \$1,500) + (air outlet \$150 for annual upkeep and maintenance X one level I stroke center X 1 year = \$150) + (regulator \$35 X 25 = \$875 X one level I stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 patients = \$1,050 X one level I stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I stroke center X 1 year = \$200) for a total of \$52,525 annually thereafter.

- b) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I stroke center X 4 years = \$100,000 for the first 4 year period and \$50 X 500



patients X one level I stroke center X 1 year = \$25,000 annually thereafter.

- c) Telemetry, electrocardiograph capability, cardiac monitor and defibrillator - (telemetry average \$800 X 500 patients = \$400,000 X one level I stroke center X 4 years = \$1,600,000 for the first 4 year period) + (electrocardiograph, cardiac monitor and defibrillator \$37,895 X one level I stroke center X 1 year (the first year) = \$37,895 for the first year + \$1,500 for annual upkeep and maintenance X one level I stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for electrocardiograph, cardiac monitor and defibrillator) for a total of \$1,642,395 for the first 4 year period and telemetry average \$800 X 500 patients = \$400,000 X one level I stroke center X 1 year = \$400,000 + \$1,500 for annual upkeep and maintenance X one level I stroke center X 1 year = \$401,500 annually thereafter.
- d) All standard intravenous fluids and administration devices, including intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard administration devices X 500 patients X one level I stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I stroke center X 4 years = \$8,000 for the first 4 year period) for a total of \$24,000 for the first 4 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I stroke center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients X one level I stroke center X 1 year = \$2,000 for the first 4 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I stroke center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- e) Drugs necessary for emergency care - saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level I stroke center X 4 years = \$200,000 for the first 4 year period and \$50,000 X one level I stroke center X 1 year = \$50,000 annually thereafter.
- f) Supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center = \$3,000 X 4 years = \$12,000 for the first 4 year period and supplies necessary for emergency care e.g. IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries - \$30 per patient X 100 patients = \$3,000 X one level I stroke center X 1 year = \$3,000 annually thereafter.

Total cost for resuscitation equipment for one level I stroke center for the post-anesthesia recovery room (PAR) for the first 4 year period - \$215,940 (letter a above) + \$100,000 (letter b above) + \$1,642,395

(letter c above) + \$24,000 (letter d above) + \$200,000 (letter e above) + \$12,000 (letter f above) = \$2,194,335 for the first 4 year period.

Total cost for resuscitation equipment for one level I stroke center for the post-anesthesia recovery room (PAR) for annually thereafter - \$52,525 (letter a above) + \$25,000 (letter b above) + \$401,500 (letter c above) + \$6,000 (letter d above) + \$50,000 (letter e above) + \$3,000 (letter f above) = \$538,025 for annually thereafter.

#### 14) Laboratory Services-

- a) Standard analyses of blood, urine and other body fluids - costs of materials \$200 X 500 patients = \$100,000 X one level I stroke center X 4 years = \$400,000 for the first 4 year period and \$200 X 500 patients X one level I stroke center X 1 year = \$100,000 annually thereafter.
- b) Blood typing and cross matching - centrifuge \$2000 X one level I stroke center X 1 year (the first year) = \$2,000 + \$250 for the annual upkeep and maintenance of the centrifuge X one level I stroke center X 3 years (years 2 through 4) = \$750 for a total of \$2,750 for the first 4 year period and \$250 for the annual upkeep and maintenance of the centrifuge X one level I stroke center X 1 year = \$250 annually thereafter.
- c) Coagulation studies - \$200 materials X 250 patients = \$50,000 X one level I stroke center X 4 years = \$200,000 for the first 4 year period and \$200 materials X 250 patients = \$50,000 X one level I stroke center X 1 year = \$50,000 annually thereafter.
- d) Blood bank or access to a community central blood bank and adequate hospital blood storage facilities - at the least blood storage refrigerators 1 large refrigerator/use of community central blood bank at \$15,000 X one level I stroke center X 1 year (the first year) = \$15,000 + \$1,500 for the annual upkeep and maintenance of the blood storage refrigerator X one level I stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$19,500 for the first 4 year period and \$1,500 for the annual upkeep and maintenance of the blood storage refrigerator X one level I stroke center X 1 year = \$1,500 annually thereafter.
- e) Blood gases and pH determinations - at least one blood gas analyzer and kit \$3000 X one level I stroke center X 4 years = \$12,000 for the first 4 year period and \$3,000 X one level I stroke center X 1 year = \$3,000 annually thereafter.
- f) Blood chemistries - test and kits average of \$350 X 100 patients = \$35,000 X one level I stroke center X 4 years = \$140,000 for the first 4 year period and \$350 X 100 patients X one level I stroke center X 1 year = \$35,000 annually thereafter.

Total cost for laboratory services for one level I stroke center for the first 4 year period - \$400,000 (letter a above) + \$ 2,750 (letter b above) + \$200,000 (letter c above) + \$19,500 (letter d above) + \$12,000 (letter

e above) + \$140,000 (letter f above) = \$ 774,250 for the first 4 year period.

Total cost for laboratory services for one level I stroke center for annually thereafter - \$100,000 (letter a above) + \$250 (letter b above) + \$50,000 (letter c above) + \$1,500 (letter d above) + \$3,000 (letter e above) + \$35,000 (letter f above) = \$189,750 for annually thereafter.

Total cost for medical equipment for one level I stroke center for the first 4 year period - \$4,800 (number 1 above) + \$1,972,835 (number 2 above) + \$1,383,435 (number 3 above) + \$1,947,585 (number 4 above) + \$2,034,335 (number 5 above) + \$1,600,000 (number 6 above) + \$3,200,000 (number 7 above) + \$41,000 (number 8 above) + \$8,250 (number 9 above) + \$2,262,835 (number 10 above) + \$198,750 (number 11 above) + \$2,270,835 (number 12 above) + \$2,194,335 (number 13 above) + \$774,250 (number 14 above) = \$19,893,245 for the first 4 year period.

Total cost for medical equipment for one level I stroke center for annually thereafter - \$1,200 (number 1 above) + \$484,025 (number 2 above) + \$334,975 (number 3 above) + \$472,275 (number 4 above) + \$498,025 (number 5 above) + \$200,000 (number 6 above) + \$400,000 (number 7 above) + \$2,000 (number 8 above) + \$750 (number 9 above) + \$556,865 (number 10 above) + \$44,750 (number 11 above) + \$558,525 (number 12 above) + \$538,025 (number 13 above) + \$189,750 (number 14 above) = \$4,281,165 for annually thereafter.

D. The stroke center shall have support services to assist the patient's family from time of entry into the facility to time of discharge - at least 1 full time equivalent medical social worker \$66,000 annually X one level I stroke center X 4 years = \$264,000 for the first 4 year period and \$66,000 X one level I stroke center X 1 year = \$66,000 for annually thereafter.

E. The stroke center shall have a stroke rehabilitation program or plan to refer those stroke patients that require rehabilitation to another facility or community agency that can provide necessary services - (at least 1 physical therapist \$74,075 annually X one level I stroke center X 4 years = \$296,300 for the first 4 year period) + (occupational therapist \$72,763 annually X one level I stroke center X 4 years = \$291,052 for the first 4 year period) + (speech therapist/pathologist \$67,834 annually X one level I stroke center X 4 years = \$271,336 for the first 4 year period) = for a total of \$858,688 for the first 4 year period and \$74,075 + \$72,763 + \$67,834 = \$214,672 X one level I stroke center X 1 year = \$214,672 for annually thereafter.

F. Courses/conferences for physicians who are not board certified.

1) National or international stroke course registration (\$1,200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level I stroke center X 4 years = \$0 for the first 4

year period and \$2,950 X no level I stroke center X 1 year = \$0 annually thereafter.

- 2) Regional stroke course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level I stroke center X 2 (one conference every two years) = \$3,500 for the first 4 year period and \$1,750 X one level I stroke center X 1 year = \$1,750 annually thereafter.
- 3) State stroke course or conference - (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level one stroke centers X 4 years = \$0 for the first 4 year period and \$1,150 X no level I stroke center X 1 year = \$0 annually thereafter.

#### G. Courses/conferences for program manager.

- 1) National or international stroke course or conference - (\$1200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level I stroke center X 4 years = \$0 for the first 4 year period and \$2,950 X no level I stroke center X 1 year = \$0 annually thereafter.
- 2) Regional stroke course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level I stroke center X 2 (one conference every two years) = \$3,500 for the first 4 year period and \$1,750 X one level I stroke center X 1 year = \$1,750 annually thereafter.
- 3) State stroke course or conference - (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level I stroke center X 4 years = \$0 for the first 4 year period and \$1,150 X no level I stroke center X 1 year = \$0 annually thereafter.

#### H. Stroke registry

- 1) Computer with internet capability/access \$600 computer + internet fee \$100/month \$1,200 annually X one level I stroke center X 4 years = \$7,200 for the first 4 year period and \$1,800 X one level I stroke center X 1 year = \$1,800 annually thereafter.
- 2) Patient registrar - \$36,258 annually X one level I stroke center X 4 years = \$145,032 for the first 4 year period and \$36,258 X one level I stroke center X 1 year = \$36,258 annually thereafter.
- 3) Training to set up stroke registry system/program for data entry - \$200 annually X one level I stroke center X 4 years = \$800 for the first 4 year period and \$200 X one level I stroke center X 1 year = \$200 annually thereafter.

- I. Public education program to promote stroke prevention and stroke symptoms awareness - e.g. community health fairs costs of printing and advertisement costs (posters, brochures etc...) \$350 for each health fair x 12 health fairs annually = \$4200 annually X one level I stroke center X 4 years = \$16,800 for the first 4 year period and \$4,200 X one level I stroke center X 1 year = \$4,200 annually thereafter.

- J. Patient education program to promote stroke prevention and stroke symptoms awareness - printing costs of brochures etc... \$500 annually X one level I stroke center X 4 years = \$2,000 for the first 4 year period and \$500 X one level I stroke center X 1 year = \$500 annually thereafter.**
- K. Professional education outreach program in catchment areas to provide training and other supports to improve care of stroke patients - e.g. hospitals sponsor at least 1 conference per year within their service area at the cost of \$2000 annually X one level I stroke center X 4 years = \$8,000 for the first 4 year period and \$2,000 X one level I stroke center = \$2,000 annually thereafter.**
- L. Stroke centers shall be actively involved in local and regional EMS systems by providing training and clinical educational resources - hospitals sponsor at least 1 conference per year within their area for EMS at the cost of \$2,000 annually X one level I stroke center X 4 years = \$8,000 for the first 4 year period and \$2,000 X one level I stroke center X one year = \$2,000 annually thereafter.**
- M. Report of findings presented at regional, state or national meetings – (\$500 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,550 X one level I stroke center X 4 years = \$6,200 for the first 4 year period and \$1,550 X one level I stroke center X 1 year = \$1,500 annually thereafter.**
- N. A lighted designated helicopter landing area at the stroke center to accommodate incoming medical helicopters which shall be cordoned off at all times from the general public. The stroke center shall also have a landing area on the hospital premises no more than three (3) minutes from the emergency room - (construction of helipad estimate of \$36,000 X 1 helipad X one level I stroke center X 1 year (the first year) = \$36,000) + (maintenance and upkeep of helipad \$2,000 X 3 years (years 2 through 4) X one level I stroke center = \$6,000) for a total of \$42,000 for the first 4 year period for the helipad + (cordoning barrier \$4,300 X 1 year (the first year) X one level I stroke center = \$4,300) + \$500 for maintenance and upkeep of the cordoning barrier X 3 years (years 2 through 4) X one level I stroke center = \$1,500) for a total of \$5,800 for the first 4 year period for the cordoning barrier for a total of \$47,800 for the first 4 year period and \$2,000 for maintenance and upkeep of helipad + \$500 for maintenance and upkeep of the cordoning barrier = \$2,500 X 1 year X one level I stroke center = \$2,500 annually thereafter.**

**Total cost for one level I stroke center for the first 4 year period -  
[\$35,349,192 letter A] + [\$6,319.36 letter B] + [\$19,893,245 letter C] +  
[\$264,000 letter D] + [\$858,688 letter E] + [\$3,500 letter F] +  
[\$3,500 letter G] + [\$153,032 letter H] + [\$16,800 letter I] +  
[\$2,000 letter J] + [\$8,000 letter K] + [\$8,000 letter L] + [\$6,200**

letter M] + [\$47,800 letter N] = \$56,620,276 for the first 4 year period.

Total cost for one level I stroke center for annually thereafter -  
[\$8,837,298 letter A] + [\$1,579.84 letter B] + [4,281,165 letter C]  
[\$66,000 letter D] + [\$214,672 letter E] + [\$1,750 letter F] + [\$1,750  
letter G] + [\$38,258 letter H] + [\$4,200 letter I] + [\$500 letter J] +  
[\$2,000 letter K] + [\$2,000 letter L] + [\$1,500 letter M] + [\$2,500  
letter N] = \$13,455,172 for annually thereafter.

It is expected that 2 level I stroke centers will be designated during the first 4 year period (\$113,240,552) and those same level I stroke centers will be designated again at some time (4 year intervals) annually thereafter (\$26,910,344).

## 2. Level II stroke centers.

### A. Salary for medical professionals.

- 1) A physician experienced in diagnosing and treating cerebrovascular diseases - \$204,430 annually X 4 years X one level II stroke center = \$817,720 for the first 4 year period and \$204,430 annually X one level II stroke center X 1 year = \$204,430 annually thereafter.
- 2) At least one other health care professional or qualified individual credentialed in stroke patient care - \$126,046 annually X 4 years X one level II stroke center = \$504,184 for the first 4 year period and \$126,046 X one level II stroke center X 1 year = \$126,046 annually thereafter.
- 3) Stroke center medical director who is recommended to be a board certified or board admissible physician with training and expertise in cerebrovascular diseases - \$204,430 annually X 4 years X one level II stroke center = \$817,720 for the first 4 year period and \$204,430 annually X one level II stroke center X 1 year = \$204,430 annually thereafter.
- 4) Stroke program manager/coordinator who is a registered nurse or a qualified individual - \$126,046 annually X 4 years X one level II stroke center = \$504,184 for the first 4 year period and \$126,046 annually X one level II stroke center X 1 year = \$126,046 annually thereafter.
- 5) Physician with board certification in physical medicine and rehabilitation or by other properly trained individuals (e.g. neurologist experienced in stroke rehabilitation) to direct the stroke center's rehabilitation services - \$200,339 annually X 4 years X one level II stroke center = \$801,356 for the first 4 year period and \$200,339 annually X one level II stroke center X 1 year = \$200,339 annually thereafter.
- 6) Neurosurgeon and back-up coverage on the call roster or available within two (2) hours by transfer agreement - \$468,766 annually X 4 years X one level II stroke center = \$1,875,064 for the first 4 year

- period and \$468,766 annually X one level II stroke center X 1 year = \$468,766 annually thereafter.
- 7) An internal medicine physician - \$181,823 annually X 4 years X one level II stroke center = \$727,292 for the first 4 year period and \$181,823 annually X one level II stroke center X 1 year = \$181,823 annually thereafter.
  - 8) A diagnostic radiologist - \$402,539 annually X 4 years X one level II stroke center = \$1,610,156 for the first 4 year period and \$402,539 annually X one level II stroke center X 1 year = \$402,539 annually thereafter.
  - 9) An anesthesiologist - \$331,932 annually X 4 years X one level II stroke center = \$1,327,728 for the first 4 year period and \$331,932 annually X one level II stroke center X 1 year = \$331,932 annually thereafter.
  - 10) Anesthesiology residents - \$61,000 annually X 4 years X one level II stroke center = \$244,000 for the first 4 year period and \$61,000 annually X one level II stroke center X 1 year = \$61,000 annually thereafter.
  - 11) Certified nurse anesthetists - \$155,095 annually X 4 years X one level II stroke center = \$620,380 for the first 4 year period and \$155,095 annually X one level II stroke center X 1 year = \$155,095 annually thereafter.
  - 12) Anesthesia assistants - \$120,000 annually X 4 years X one level II stroke center = \$480,000 for the first 4 year period and \$120,000 X one level II stroke center X 1 year = \$120,000 annually thereafter.
  - 13) Emergency department physician credentialed for stroke care by the stroke center 24 hours a day, 7 days a week - \$244,973 annually X 4 years X 3 emergency department physicians X one level II stroke center = \$2,939,676 for the first 4 year period and \$244,973 annually X 3 emergency department physicians X one level II stroke center X 1 year = \$734,919 annually thereafter.
  - 14) Registered nurses in the emergency department - \$64,533 annually X 5 registered nurses in the emergency department X 4 years X one level II stroke center = \$1,290,660 for the first 4 year period and \$64,533 annually X 5 registered nurses in the emergency department X one level II stroke center X 1 year = \$322,665 annually thereafter.
  - 15) Medical director of the emergency department - \$199,038 annually X 4 years X one level II stroke center = \$796,152 for the first 4 year period and \$199,038 annually X one level II stroke center X 1 year = \$199,038 annually thereafter.
  - 16) An intensive care unit medical director for stroke center intensive care unit - \$177,560 annually X 4 years X one level II stroke center = \$710,240 for the first 4 year period and \$177,560 annually X one level II stroke center X 1 year = \$177,560 annually thereafter.
  - 17) The stroke center intensive care unit shall have a physician on duty or available 24 hours a day 7 days a week - \$244,553 annually X 3 stroke center intensive care unit physicians X 4 years X one level II stroke center = \$2,934,636 for the first 4 year period and \$244,553 annually X 3 stroke center intensive care unit physicians

- X one level II stroke center X 1 year = \$733,659 annually thereafter.
- 18) The stroke center intensive care unit shall have a 1 to 1 or 1 to 2 registered nurse/patient ratio used for critically ill patients requiring intensive care unit level of care - \$67,623 annually X 5 registered nurses in the stroke center intensive care unit X 4 years X one level II stroke center = \$1,352,460 for the first 4 year period and \$67,623 annually X 5 registered nurses in the stroke center intensive care unit X one level II stroke center X 1 year = \$338,115 annually thereafter.
- 19) Stroke unit medical director - \$177,560 annually X 4 years X one level II stroke center = \$710,240 for the first 4 year period and \$177,560 annually X one level II stroke center X 1 year = \$177,560 annually thereafter.
- 20) Physician on duty or available 24 hours a day, 7 days a week in the stroke center stroke unit - \$177,560 annually X 3 physicians in the stroke center stroke unit X 4 years X one level II stroke center = \$2,130,720 for the first 4 year period and \$177,560 annually X 3 physicians in the stroke center stroke unit X one level II stroke center X 1 year = \$532,680 annually thereafter.
- 21) Stroke center stroke unit shall have registered nurses and other essential personnel on duty 24 hours a day 7 days a week - \$65,097 annually for the registered nurse X 4 registered nurses in the stroke center stroke unit X 4 years X one level II stroke center = \$1,041,552 for the first 4 year period and \$65,097 annually for the registered nurse X 4 registered nurses X one level II stroke center X 1 year = \$260,388 annually thereafter.
- 22) Magnetic resonance imaging technologist on call and available within 60 minutes, 24 hours a day, 7 days a week - \$59,750 annually X 4 magnetic resonance imaging technologists X 4 years X one level II stroke center = \$956,000 for the first 4 year period and \$59,750 annually X 4 magnetic resonance imaging technologists X one level II stroke center X 1 year = \$239,000 annually thereafter.
- 23) The stroke center post-anesthesia recovery room with neurosurgical capability shall have registered nurses and other essential personnel on call and available within 60 minutes 24 hours a day 7 days a week - \$65,097 annually X 4 registered nurses X 4 years X one level II stroke center = \$1,041,552 for the first 4 year period and \$65,097 annually X 4 registered nurses X one level II stroke center X 1 year = \$260,388 annually thereafter.
- 24) Computerized tomography technologist - \$58,895 annually X 4 computerized tomography technologists X 4 years X one level II stroke center = \$942,320 for the first 4 year period and \$58,895 annually X 4 computerized tomography technologists X one level II stroke center X 1 year = \$235,580 annually thereafter.
- 25) Neurologist/radiologist - average \$300,000 annually X 3 neurologist/radiologists X 4 years X one level II stroke center = \$3,600,000 for the first 4 year period and \$300,000 annually X 3



neurologist/radiologists X one level II stroke center X 1 year = \$900,000 annually thereafter.

- 26) Transport nurse/radiology technician - average \$62,000 annually X 4 years X one level II stroke center = \$248,000 for the first 4 year period and \$62,000 annually X one level II stroke center X 1 year = \$62,000 annually thereafter.
- 27) Scrub nurse \$68,655 annually X 4 scrub nurses X 4 years X one level II stroke center = \$1,098,480 for the first 4 year period and \$68,655 annually X 4 scrub nurses X one level II stroke center X 1 year = \$274,620 annually thereafter.
- 28) Nurse educator/supervisor to ensure staff are trained on core competencies - \$78,500 annually X 4 years X one level II stroke center = \$314,000 for the first 4 year period and \$78,500 annually X one level II stroke center X 1 year = \$78,500 thereafter.

Total salary cost for medical professionals for one level II stroke center for the first 4 year period - \$817,720 (#1 above) + \$504,184 (#2 above) + \$817,720 (#3 above) + \$504,184 (#4 above) + \$801,356 (#5 above) + \$1,875,064 (#6 above) + \$727,292 (#7 above) + \$1,610,156 (#8 above) + \$1,327,728 (#9 above) + \$244,000 (#10 above) + \$620,380 (#11 above) + \$480,000 (#12 above) + \$2,939,676 (#13 above) + \$1,290,660 (#14 above) + \$796,152 (#15 above) + \$710,240 (#16 above) + \$2,934,636 (#17 above) + \$1,352,460 (#18 above) + \$710,240 (#19 above) + \$2,130,720 (#20 above) + \$1,041,552 (#21 above) + \$956,000 (#22 above) + \$1,041,552 (#23 above) + \$942,320 (#24 above) + \$3,600,000 (#25 above) + \$248,000 (#26 above) + \$1,098,480 (#27 above) + \$314,000 (#28 above) = \$32,436,472 for the first four year period.

Total salary cost for medical professionals for one level II stroke center for annually thereafter - \$204,430 (#1 above) + \$126,046 (#2 above) + \$204,430 (#3 above) + \$126,046 (#4 above) + \$200,339 (#5 above) + \$468,766 (#6 above) + \$181,823 (#7 above) + \$402,539 (#8 above) + \$331,932 (#9 above) + \$61,000 (#10 above) + \$155,095 (#11 above) + \$120,000 (#12 above) + \$734,919 (#13 above) + \$322,665 (#14 above) + \$199,038 (#15 above) + \$177,560 (#16 above) + \$733,659 (#17 above) + \$338,115 (#18 above) + \$177,560 (#19 above) + \$532,680 (#20 above) + \$260,388 (#21 above) + \$239,000 (#22 above) + \$260,388 (#23 above) + \$235,580 (#24 above) + \$900,000 (#25 above) + \$62,000 (#26 above) + \$274,620 (#27 above) + \$78,500 (#28 above) = \$8,109,118 for annually thereafter.

**B. Continuing education costs for level I stroke center staff.**

- 1.) Level II core team members of the stroke call roster shall complete a minimum of 8 hours of continuing education in cerebrovascular disease every year – average of \$10.00 per hour for online training X 8 hours = \$80 X one level II stroke center X 4 years = \$320 for the first 4 year period and \$10.00 per hour X 8 hours X one level II stroke center X 1 year = \$80 annually thereafter.

- 2.) Level II core team member of the stroke call roster shall complete a minimum of 8 hours of continuing education in cerebrovascular disease every year – average of \$39.99 annually for online training -  $\$39.99 \times \text{one level II stroke center} \times 4 \text{ years} = \$159.96$  for the first 4 year period and  $\$39.99 \times \text{one level II stroke center} \times 1 \text{ year} = \$39.99$  annually thereafter.
- 3.) Level II stroke call roster member (emergency department physician) shall complete minimum average of 8 hours of continuing education in cerebrovascular disease every year - average of \$10.00 per hour for online training  $\times 8 \text{ hours} \times \text{one level II stroke center} \times 4 \text{ years} = \$320$  for the first 4 year period and  $\$10.00 \text{ per hour} \times 8 \text{ hours} \times \text{one level II stroke center} \times 1 \text{ year} = \$80$  annually thereafter.
- 4.) Level II stroke call roster member (a physician with experience and expertise in diagnosing and treating patients with cerebrovascular disease) shall complete minimum average of 8 hours of continuing education in cerebrovascular disease every year - average of \$10.00 per hour for online training  $\times 8 \text{ hours} \times \text{one level I stroke center} \times 4 \text{ years} = \$320$  for the first 4 year period and  $\$10.00 \times 8 \text{ hours} \times \text{one level II stroke center} \times 1 \text{ year} = \$80$  annually thereafter.
- 5.) Level II stroke call roster member (others as appropriate) shall complete minimum average of 8 hours of continuing education in cerebrovascular disease every year - average of \$10.00 per hour for online training  $\times 8 \text{ hours} \times \text{one level II stroke center} \times 4 \text{ years} = \$320$  annually  $\times 3 \text{ others as appropriate} = \$960$  for the first 4 year period and  $\$10.00 \text{ per hour} \times 8 \text{ hours} \times \text{one level II stroke center} \times 1 \text{ year} = \$80 \times 3 \text{ others as appropriate} = \$240$  annually thereafter.
- 6.) A level II stroke center medical director shall complete a minimum of 8 hours of continuing medical education every year in the area of cerebrovascular disease - average of \$10.00 per hour for online training  $\times 8 \text{ hours} \times \text{one level II stroke center} \times 4 \text{ years} = \$320$  for the first 4 year period and  $\$10.00 \times 8 \text{ hours} \times \text{one level II stroke center} \times 1 \text{ year} = \$80$  annually thereafter.
- 7.) A level II program manager/coordinator shall complete a minimum of 8 hours of continuing education every year in cerebrovascular disease - average of \$39.99 annually for online training =  $\$39.99 \times \text{one level II stroke center} \times 4 \text{ years} = \$159.96$  for the first 4 year period and  $\$39.99 \times \text{one level II stroke center} \times 1 \text{ year} = \$39.99$  annually thereafter.
- 8.) Emergency department physicians in level II stroke centers shall complete a minimum average of 4 hours of continuing medical education in cerebrovascular disease every year - average of \$10.00 per hour for online training  $\times 3 \text{ physicians in the emergency room} \times 4 \text{ hours} \times \text{one level II stroke center} \times 4 \text{ years} = \$480$  for the first 4 year period and  $\$10.00 \times 3 \text{ physicians} \times 4 \text{ hours} \times \text{one level II stroke center} \times 1 \text{ year} = \$120$  annually thereafter.

- 9.) Registered nurses assigned to the emergency departments in level II stroke centers shall complete a minimum of 4 hours of continuing education in the area of cerebrovascular disease every year - average of \$39.99 annually for online training = \$39.99 X 5 registered nurses in the emergency room X one level II stroke center X 4 years = \$799.80 for the first 4 year period and \$39.99 X 5 registered nurses in the emergency room X one level II stroke center X 1 year = \$199.95 annually thereafter.
- 10.) Registered nurses assigned to the intensive care unit in level II stroke centers who care for stroke patients shall complete a minimum of 8 hours of continuing education in the area of cerebrovascular disease every year - average of \$39.99 annually for online training X 4 registered nurses in the intensive care unit X one level II stroke center X 4 years = \$639.84 for the first 4 year period and \$39.99 annually X 4 registered nurses in the intensive care unit X one level II stroke center X 1 year = \$159.96 annually thereafter.
- 11.) Stroke unit registered nurses in level II stroke centers shall complete a minimum of 8 hours of continuing education in the area of cerebrovascular disease every year - average of \$39.99 annually X 4 stroke unit registered nurses X one level II stroke center X 4 years = \$639.84 for the first 4 year period and \$39.99 X 4 registered nurses X one level II stroke center X 1 year = \$159.96 annually thereafter.

Total costs for continuing education for one level II stroke center for the first 4 year period - \$320 (#1 above) + \$159.96 (#2 above) + \$320 (#3 above) + \$320 (#4 above) + \$960 (#5 above) + \$320 (#6 above) + \$159.96 (#7 above) + \$480 (#8 above) + \$799.80 (#9 above) + \$639.84 (#10 above) + \$639.84 (#11 above) = \$5,119.40 for the first 4 year period.

Total costs for continuing education for one level II stroke center for annually thereafter - \$80 (#1 above) + \$39.99 (#2 above) + \$80 (#3 above) + \$80 (#4 above) + \$240 (#5 above) + \$80 (#6 above) + \$39.99 (#7 above) + \$120 (#8 above) + \$199.95 (#9 above) + \$159.96 (#10 above) + \$159.96 (#11 above) = \$1,279.85 for annually thereafter.

### **C. Medical Equipment.**

- 1) Electronic communication devices for stroke call roster members- 2 electronic communication devices (cell phone and beeper/pager) X \$300 for the annual cost of each electronic communication device X 2 stroke call roster members (one member on call and one back-up member on call) carrying this device X 4 years X one level II stroke center = \$4,800 for the first 4 year period and 2 electronic communication devices (cell phone and beeper/pager) X \$300 for the annual cost of each electronic communication device X 2 stroke call roster members carrying this device (one member on call and one

back-up member) X one level II stroke center X 1 year = \$1,200 annually thereafter.

2) Resuscitation equipment for the emergency department -

- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level II stroke center X 4 years = \$2,400 for the first 4 year period and at least 2 X \$300 each = \$600 X one level II stroke center X 1 year = \$600 annually thereafter.
- b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 1 year = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 1 year = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level II stroke center X 1 year (the first year) = \$490 + \$150 annual upkeep and maintenance of air outlets X one level II stroke center X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level II stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1050 X one level II stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) for a total of \$102,040 for the first 4 year period and (air outlet \$150 annual upkeep and maintenance of air outlets X one level II stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level II stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1050 X one level II stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients X one level II stroke center X 1 year = \$200) for a total of \$25,425 annually thereafter.
- e) Mechanical ventilator - \$7000 X one level II stroke center X 1 year (the first year) = \$7000 for the first year + \$1,500 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$11,500 for the first 4

- year period and \$1,500 for the annual upkeep and maintenance X one level II stroke center X 1 year = \$1,500 annually thereafter.
- f) Suction devices - suction device canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$50 X 500 patients X one level II stroke center X 1 year = \$25,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level II stroke center X 1 year (the first year) = \$37,895 for the first year + \$1,500 for the annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 and \$1,500 for the annual upkeep and maintenance X one level II stroke center X 1 year = \$1,500 annually thereafter.
- h) Central line insertion equipment - \$600 X 300 patients = \$180,000 X one level II stroke center X 4 years = \$720,000 for the first 4 year period and \$600 X 300 patients = \$180,000 X one level II stroke center X 1 year = \$180,000 annually thereafter.
- i) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000) + (\$4.00 each for standard intravenous catheters X 500 = \$2,000 X one level II stroke center X 4 years = \$8,000) for a total of \$24,000 for the first 4 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 = \$2,000 X one level II stroke center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- j) Intraosseous devices - needles \$25 each X 300 patients = \$7,500 x one level II stroke center X 4 years = \$30,000 for the first 4 year period and \$25 each X 300 patients = \$7,500 X one level II stroke center X 1 year = \$7,500 annually thereafter.
- k) Drugs necessary for emergency care - saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level II stroke center X 4 years = \$200,000 for the first 4 year period and \$100 X 500 patients = \$50,000 X one level II stroke center X 1 year = \$50,000 annually thereafter.
- l) Two-way communication link with emergency medical service vehicles - \$1200 apiece = \$1200 X one level II stroke center X 4 years = \$4,800 for the first 4 year period and \$1200 X one level II stroke center X 1 year = \$1,200 annually thereafter.
- m) End-tidal carbon dioxide monitor - \$3,900 X one level II stroke center X 1 year (the first year) = \$3,900 for the first year + \$1,500 for the annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$8,400 for the first 4 year period and \$1,500 for

annual upkeep and maintenance X one level II stroke center X  
1 year = \$1,500 annually thereafter.

- n) Temperature control devices for patient and resuscitation fluids - \$270 pack of 10 (Bair Hugger Therapy) X 30 = \$8,100 X one level II stroke center X 4 years = \$32,400 for the first 4 year period and \$270 pack of 10 (Bair Hugger Therapy) X 30 = \$8,100 X one level II stroke center X 1 year = \$8,100 annually thereafter.
- o) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$25,000 X one level II stroke center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II stroke center for the emergency department for the first 4 year period - \$2,400 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$102,040 (letter d above) + \$11,500 (letter e above) + \$100,000 (letter f above) + \$42,395 (letter g above) + \$720,000 (letter h above) + \$24,000 (letter i above) + \$30,000 (letter j above) + \$200,000 (letter k above) + \$4,800 (letter l above) + \$8,400 (letter m above) + \$32,400 (letter n above) + \$100,000 (letter o above) = \$1,477,935 for the first 4 year period.

Total cost for resuscitation equipment for one level II stroke center for the emergency room department for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,425 (letter d above) + \$1,500 (letter e above) + \$25,000 (letter f above) + \$1,500 (letter g above) + \$180,000 (letter h above) + \$6,000 (letter i above) + \$7,500 (letter j above) + \$50,000 (letter k above) + \$1,200 (letter l above) + \$1,500 (letter m above) + \$8,100 (letter n above) + \$25,000 (letter o above) = \$358,325 for annually thereafter.

- 3) Resuscitation equipment for the intensive care unit -
- a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes, bag-mask resuscitator and a mechanical ventilator - (laryngoscopes at least 2 X \$300 each = \$600 X one level II stroke center X 4 years = \$2,400 for the first 4 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period) + (bag-mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period) + (mechanical ventilator \$7000 X one level II stroke center X 1 year (the first year) = \$7,000 + \$1,500 for annual upkeep and maintenance of the mechanical ventilator X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of 11,500 for the first 4 year period) for a total of \$113,900 for the first 4 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level II stroke center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 1

year = \$12,500) + (bag-mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 1 year = \$12,500) + (annual upkeep and maintenance of the mechanical ventilator \$1,500 X one level II stroke center X 1 year = \$1,500) for a total of \$27,100 annually thereafter.

- b) Oxygen source with concentration controls - (air outlet \$70 X 7 = \$490 X one level II stroke center X 1 year (the first year) = \$490 + \$150 for upkeep and maintenance of air outlets X one level II stroke center X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator \$35 X 25 = \$875 X one level II stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level II stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) for a total of \$102,040 for the first 4 year period and (air outlet \$70 X 7 = \$490 X one level II stroke center X 1 year = \$490) + (regulator \$35 X 25 = \$875 X one level II stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 = \$200 X one level II stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 1 year = \$200) for a total of \$25,765 annually thereafter.
- c) Cardiac emergency cart, including medications - at least 1 cardiac emergency cart \$1,600 X one level II stroke center X 1 year (the first year) = \$1,600 for the first 4 year period + medications and suction devices \$1,000 X one level II stroke center X 4 years = \$4,000 for the first 4 year period for a total of \$5,600 for the first 4 year period and \$1,000 for medications and suction devices X one level II stroke center X 1 year = \$1,000 annually thereafter.
- d) Telemetry, electrocardiograph capability, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X one level II stroke center X 4 years = \$1,600,000 for the first 4 year period) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X one level II stroke center X 1 year (the first year) = \$37,895 + \$1,500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for the first 4 year period) for a total of \$1,642,395 for

- the first 4 year period and (telemetry \$800 X 500 patients = \$400,000 X one level II stroke center X 1 year = \$400,000 + (electrocardiograph, cardiac monitor and defibrillator \$1,500 for upkeep and maintenance X one level II stroke center X 1 year = \$1,500) for a total of \$401,500 annually thereafter.
- e) Electronic pressure monitoring and pulse oximetry - (electronic pressure monitoring devices \$100 X 25 = \$2,500 X one level II stroke center X 4 years = \$10,000 for the first 4 year period) + (pulse oximetry devices \$100 X 25 = \$2,500 X one level II stroke center X 4 years = \$10,000 for the first 4 year period) for a total of \$20,000 for the first 4 year period and (electronic pressure monitoring devices \$100 X 25 = \$2,500 X one level II stroke center X 1 year = \$2,500) + (pulse oximetry devices \$100 X 25 = \$2,500 X one level II stroke center X 1 year = \$2,500) for a total of \$5,000 annually thereafter.
- f) End-tidal carbon dioxide monitor - \$3,900 X one level II stroke center X 1 year (the first year) = \$3,900 for the first year + \$500 for the upkeep and maintenance of the end-tidal carbon dioxide monitor X one level II stroke center X 3 years (years 2 through 4) = \$1,500 for a total of \$5,400 for the first 4 year period and \$500 for the upkeep and maintenance of the end-tidal carbon dioxide monitor X one level II stroke center X 1 year = \$500 annually thereafter.
- g) Patient weight devices - \$1000 X one level II stroke center X 1 year (the first year) = \$1000 for the first year + \$250 for the annual upkeep and maintenance of patient weight devices X one level II stroke center X 3 years (years 2 through 4) = \$750 for a total of \$1,750 for the first 4 year period and \$250 for the annual upkeep and maintenance of patient weight devices X one level II stroke center X 1 year = \$250 annually thereafter.
- h) Drugs and intravenous fluids - \$200 X 500 patients = \$100,000 X one level II stroke center X 4 years = \$400,000 for the first 4 year period and \$200 X 500 patients X one level II stroke center = \$100,000 annually thereafter.
- i) Intracranial pressure monitoring devices - digital \$13,000 X one level II stroke center X 1 year (the first year) = \$13,000 for the first year + \$1,500 for upkeep and maintenance of intracranial pressure monitoring devices X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$17,500 for the first 4 year period and \$1,500 for upkeep and maintenance of intracranial pressure monitoring devices X one level II stroke center X 1 year = \$1,500 for a total of \$1,500 for annually thereafter.
- j) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$25,000 X one level II stroke center X 1 year = \$25,000 annually thereafter.



Total cost for resuscitation equipment for one level II stroke center for the intensive care unit for the first 4 year period - \$113,900 (letter a above) + \$102,040 (letter b above) + \$5,600 (letter c above) + \$1,642,395 (letter d above) + \$20,000 (letter e above) + \$5,400 (letter f above) + \$1,750 (letter g above) + \$400,000 (letter h above) + \$17,500 (letter i above) + \$100,000 (letter j above) = \$2,408,585 for the first 4 year period.

Total cost for resuscitation equipment for one level II stroke center for the intensive care unit for annually thereafter - \$27,100 (letter a above) + \$25,765 (letter b above) + \$1,000 (letter c above) + \$401,500 (letter d above) + \$5,000 (letter e above) + \$500 (letter f above) + \$250 (letter g above) + \$100,000 (letter h above) + \$1,500 (letter i above) + \$25,000 (letter j above) = \$587,615 for annually thereafter.

- 4) Stroke center stroke unit resuscitation equipment-
  - a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes - (laryngoscopes at least 2 X \$300 each = \$600 X one level II stroke center X 4 years = \$2,400 for the first 4 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period) + (mechanical ventilator \$7000 X one level II stroke center X 1 year (the first year) + \$1,500 for annual upkeep and maintenance of ventilator X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$11,500 for the first 4 year period) for a total of \$63,900 for the first 4 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level II stroke center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II stroke center X 1 year = \$12,500) + (mechanical ventilator \$1,500 annual upkeep, maintenance and repair X one level II stroke center X 1 year = \$1,500) for a total of \$14,600 annually thereafter.
  - b) Bag-mask resuscitator and sources of oxygen - (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period) + (air outlet \$70 X 7 = \$490 X one level II stroke center X 1 year (the first year) + \$150 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level II stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level II stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tanks \$70 X 300 = \$21,000 X one

level II stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) for a total of \$152,040 for the first 4 year period and (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 1 year = \$12,500) + (air outlet \$150 for annual upkeep and maintenance X one level II stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level II stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 1 year = \$200) for a total of \$37,925 annually thereafter.

- c) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$25,000 X one level II stroke center X 1 year = \$25,000 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X one level II stroke center X 4 years = \$1,600,000 for the first 4 year period) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X one level II stroke center X 1 year (the first year) + \$1,500 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$42,395 for the first 4 year period) for a total of \$1,642,395 for the first 4 year period and (telemetry \$800 X 500 patients = \$400,000 X one level II stroke center X 1 year = \$400,000) + (\$1,500 for annual upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level II stroke center X 1 year = \$1,500) for a total of \$401,500 annually thereafter.
- e) All standard intravenous fluids and administration devices and intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period) for a total of \$24,000 for the first 4 year period (\$4.00 each for standard intravenous fluids

- X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- f) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 100 patients = \$10,000 X one level II stroke center X 4 years = \$40,000 for the first 4 year period and \$10,000 X one level II stroke center X 1 year = \$10,000 annually thereafter.
- g) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$25,000 X one level II stroke center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II stroke center stroke unit for the first 4 year period - \$63,900 (letter a above) + \$152,040 (letter b above) + \$100,000 (letter c above) + \$1,642,395 (letter d above) + \$24,000 (letter e above) + \$40,000 (letter f above) + \$100,000 (letter g above) = \$2,122,335 for the first 4 year period.

Total cost for resuscitation equipment for one level II stroke center stroke unit for annually thereafter - \$14,600 (letter a above) + \$37,925 (letter b above) + \$25,000 (letter c above) + \$401,500 (letter d above) + \$6,000 (letter e above) + \$10,000 (letter f above) + \$25,000 (letter g above) = \$520,025 for annually thereafter.

- 5) Angiography with interventional capability available 24 hours a day, 7 days a week, in-house computerized tomography, computerized tomography perfusion, computerized tomography angiography - \$1,000,000 average for CT machine with these capabilities = \$1,000,000 X one level II stroke center X 1 year (the first year) = \$1,000,000 for the first year + \$200,000 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$600,000 for a total of \$1,600,000 for the first 4 year period and \$200,000 for annual upkeep and maintenance X one level II stroke center X 1 year = \$200,000 annually thereafter.
- 6) Magnetic resonance imaging, magnetic resonance angiogram/magnetic resonance venography - average cost \$2,000,000 for MRI machine with these capabilities = \$2,000,000 X one level II stroke center X 1 year (the first year) = \$2,000,000 for the first year) + \$400,000 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$1,200,000 for a total of \$3,200,000 for the first 4 year period and \$400,000 for annual upkeep

and maintenance X one level II stroke center X 1 year = \$400,000 annually thereafter.

- 7) Extra cranial ultrasound, trans thoracic echo and trans esophageal echo-average \$35,000 for ultrasound machine = \$35,000 X one level II stroke center X 1 year (the first year) = \$35,000 for the first year + \$2,000 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$6,000 = for a total of \$41,000 for the first 4 year period and \$2,000 for annual upkeep and maintenance X one level II stroke center X 1 year = \$2,000 annually thereafter.
- 8) Resuscitation equipment for the radiology department-
  - a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level II stroke center X 4 years = \$2,400 for the first 4 year period and at least 2 X \$300 each = \$600 X one level II stroke center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 X one level II stroke center X 1 year = \$12,500 annually thereafter.
  - c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period and \$250 for a pack of 10 X 50 packs X one level II stroke center X 1 year = \$12,500 annually thereafter.
  - d) Sources of oxygen - (air outlet \$70 X 7= \$490 X one level II stroke center X 1 year (the first year) = \$490 for the first year + \$150 annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level II stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level II stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) for a total of \$102,040 for the first 4 year period and (air outlet \$70 X 7= \$490 X one level II stroke center X 1 year = \$490) + (regulator for air outlet \$35 X 25 = \$875 X one level II stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II stroke

- center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 1 year = \$200) for a total of \$25,765 for annually thereafter.
- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$50 X 500 X one level II stroke center X 1 year = \$25,000 annually thereafter.
  - f) Telemetry - average of \$800 X 500 patients = \$400,000 X one level II stroke center X 4 years = \$1,600,000 for the first 4 year period and \$800 X 500 patients X one level II stroke center X 1 year = \$400,000 annually thereafter.
  - g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level II stroke center = \$37,895 X one level II stroke center X 1 year (first year) = \$37,895 for the first year + \$1,500 for the annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for the first 4 year period and \$1,500 for the annual upkeep and maintenance X one level II stroke center X 1 year = \$1,500 for annually thereafter.
  - h) All standard administration devices - \$4.00 each X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period and \$2,000 X one level II stroke center X 1 year = \$2,000 annually thereafter.
  - i) All standard intravenous catheters - \$4.00 each X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period and \$2,000 X one level II stroke center X 1 year = \$2,000 annually thereafter.
  - j) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level II stroke center X 4 years = \$200,000 for the first 4 year period and \$50,000 X one level II stroke center X 1 year = \$50,000 annually thereafter.
  - k) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$25,000 X one level II stroke center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II stroke center for the radiology department for the first 4 year period - \$2,400 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$102,040 (letter d above) + \$100,000 (letter e above) + \$1,600,000 (letter f above) + \$42,395 (letter g above) + \$8,000 (letter h above) + \$8,000 (letter i above) + \$200,000 (letter j above) + \$100,000 (letter k above) = \$2,262,835 for the first 4 year period.

Total cost for resuscitation equipment for one level II stroke center for the radiology department for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,765 (letter d above) + \$25,000 (letter e above) + \$400,000 (letter f above) + \$1,500 (letter g above) + \$2,000 (letter h above) + \$2,000 (letter i above) + \$50,000 (letter j above) + \$25,000 (letter k above) = \$556,865 for annually thereafter.

- 9) Operating rooms shall have at least the following equipment:
  - a) Operating microscope - \$15,000 X one level II stroke center X 1 year (first year) = \$15,000 for the first year + \$1,500 for annual upkeep and maintenance X one level II stroke center X 4 years (years two through four) = \$6,000 for a total of \$21,000 for the first 4 year period and \$1,500 for annual upkeep and maintenance X one level II stroke center X 1 year = \$1,500 annually thereafter.
  - b) Thermal control equipment for patient and resuscitation fluids - (temperature control devices \$2,750 each X 2 = \$5,500 X one level II stroke center X 1 year (the first year) = \$5,500 for the first year + \$2,750 X 1 = \$2,750 for replacement X 3 years X one level II stroke center = \$8,250 for a total of \$13,750 for the first 4 year period) + (blankets \$270 pack of 10 X 50 = \$13,500 X one level II stroke center X 4 years = \$54,000 for the first 4 year period) + (resuscitation fluids \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period) for a total of \$167,750 for the first 4 year period and (temperature control devices \$2,750 each X 1 = \$2,750 for replacement X one level II stroke center X 1 year = \$2,750) + (blankets \$270 pack of 10 X 50 = \$13,500 X one level II stroke center X one year = \$13,500) + (resuscitation fluids \$50 X 500 patients = \$25,000 X one level II stroke center X 1 year) = \$25,000) for a total of \$41,250 for annually thereafter.
  - c) Instruments necessary to perform an open craniotomy - \$1,500 X one level II stroke center X 4 years = \$6,000 for the first 4 year period and \$1500 X one level II stroke center X 1 year = \$1,500 annually thereafter.
  - d) Monitoring equipment - \$4,000 X one level II stroke center X 1 year (the first year) = \$4,000 for the first year + \$500 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$1,500 for a total of \$5,500 for the first 4 year period and \$500 for annual upkeep and maintenance X one level II stroke center X 1 year = \$500 annually thereafter.

Total cost for operating room equipment for one level II stroke center for the first 4 year period - \$21,000 (letter a above) + \$167,750 (letter b above) + \$6,000 (letter c above) + \$5,500 (letter d above) = \$200,250 for the first four year period.

Total cost for operating room equipment for one level II stroke center for annually thereafter - \$1,500 (letter a above) + \$41,250 (letter b

above) + \$1,500 (letter c above) + \$500 (letter d above) = \$44,750 for annually thereafter.

**10) Resuscitation equipment available to the operating room -**

- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level II stroke center X 4 years = \$2,400 for the first 4 year period and \$600 X one level II stroke center X 1 year = \$600 annually thereafter.
- b) Endotracheal tubes of all sizes - 250 for a pack of 10 X 50 = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period and \$12,500 X one level II stroke center X 1 year = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period and \$12,500 X one level II stroke center X 1 year = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level II stroke center X 1 year (the first year) = \$490 for the first year + air outlet annual upkeep and maintenance \$150 X one level II stroke center X 3 years (years 2 through 4) = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level II stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level II stroke center X 4 years = \$4,200 for the first 4 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) for a total of \$102,040 for the first 4 year period and (air outlet annual upkeep and maintenance \$150 X one level II stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level II stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 1 year = \$200) for a total of \$25,425 annually thereafter.
- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period

- and \$25,000 X one level II stroke center X 1 year = \$25,000 annually thereafter.
- f) Telemetry- average of \$800 X 500 patients = \$400,000 X one level II stroke center X 4 years = \$1,600,000 for the first 4 year period and \$400,000 X one level II stroke center X 1 year = \$400,000 annually thereafter.
  - g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level II stroke center X 1 year (the first year) = \$37,895 + \$1,500 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for the first 4 year period and \$1,500 for the annual upkeep and maintenance X one level II stroke center X 1 year = \$1,500 annually thereafter.
  - h) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period) for a total of \$24,000 for the first 4 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
  - i) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level II stroke center X 4 years = \$200,000 for the first 4 year period and \$100 X 500 patients X one level II stroke center X 1 year = \$50,000 annually thereafter.
  - j) Supplies necessary for emergency care (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$50 X 500 patients = \$25,000 X one level II stroke center X 1 year = \$25,000 annually thereafter.

**Total cost for resuscitation equipment for one level II stroke center operating room for the first 4 year period - \$2,400 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$102,040 (letter d above) + \$100,000 (letter e above) + \$1,600,000 (letter f above) + \$42,395 (letter g above) + \$24,000 (letter h above) + \$200,000 (letter i**



above) + \$100,000 (letter j above) = \$2,270,835 for the first four year period.

Total cost for resuscitation equipment for one level II stroke center operating room annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,425 (letter d above) + \$25,000 (letter e above) + \$400,000 (letter f above) + \$1,500 (letter g above) + \$6,000 (letter h above) + \$50,000 (letter i above) + \$25,000 (letter j above) = \$558,525 for annually thereafter.

**11) Resuscitation equipment for the post-anesthesia recovery room (PAR)-**

- a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes, bag-mask resuscitator, sources of oxygen and a mechanical ventilator- (laryngoscopes at least 2 X \$300 each = \$600 X one level II stroke center X 4 years = \$2,400 for the first 4 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period) + (bag-mask resuscitator \$250 for a pack of 10 X 50 = \$12,500 X one level II stroke center X 4 years = \$50,000 for the first 4 year period) + (mechanical ventilator \$7000 X one level II stroke center X 1 year (the first year) = \$7,000 + \$1,500 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$11,500 for the first 4 year period) + (air outlet \$70 X 7 = \$490 X one level II stroke center X 1 year (the first year) = \$490 + \$150 for annual upkeep and maintenance X 3 years (years 2 through 4 = \$450 for a total of \$940 for the first 4 year period) + (regulator \$35 X 25 = \$875 X one level II stroke center X 4 years = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 4 years = \$800 for the first 4 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 4 years = \$4,800 for the first 4 year period) + (ambu bags \$10.50 X 100 patients = \$1,050 X one level II stroke center X 4 years = \$4,200) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 4 years = \$84,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 4 years = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 4 years = \$800) for a total of \$215,940 for the first 4 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level II stroke center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II stroke center X 1 year = \$12,500) + (bag-mask resuscitator \$250 for a pack of 10 X 50 = \$12,500 X one level II stroke center X 1 year = \$12,500) + (mechanical ventilator \$1,500 for annual upkeep and maintenance X one level II stroke center X 1 year = \$1,500) + (air outlet \$150

for annual upkeep and maintenance X one level II stroke center X 1 year = \$150) + (regulator \$35 X 25 = \$875 X one level II stroke center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II stroke center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II stroke center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 patients = \$1,050 X one level II stroke center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II stroke center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II stroke center X 1 year = \$200) for a total of \$52,525 annually thereafter.

- b) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II stroke center X 4 years = \$100,000 for the first 4 year period and \$50 X 500 patients X one level II stroke center X one year = \$25,000 annually thereafter.
- c) Telemetry, electrocardiograph capability, cardiac monitor and defibrillator - (telemetry average \$800 X 500 patients = \$400,000 X one level II stroke center X 4 years = \$1,600,000 for the first 4 year period) + (electrocardiograph, cardiac monitor and defibrillator \$37,895 X one level II stroke center X 1 year (the first year) = \$37,895 for the first year) + (\$1,500 for annual upkeep and maintenance X one level II stroke center X 3 years (years 2 through 4) = \$4,500 for a total of \$42,395 for electrocardiograph, cardiac monitor and defibrillator for a total of \$1,642,395 for the first 4 year period and \$1,500 for annual upkeep and maintenance X one level II stroke center X 1 year = \$1,500 annually thereafter.
- d) All standard intravenous fluids and administration devices, including intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard administration devices X 500 patients X one level II stroke center X 4 years = \$8,000 for the first 4 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II stroke center X 4 years = \$8,000 for the first 4 year period) for a total of \$24,000 for the first 4 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients X one level II stroke center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II stroke center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- e) Drugs necessary for emergency care- saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level II stroke center X 4 years = \$200,000 for the first 4 year period and \$50,000 X one level II stroke center X 1 year = \$50,000 annually thereafter.
- f) Supplies necessary for emergency care – (IV start packs, IV tubing,

syringes, gauze alcohol preps, light bulbs, exam gloves, batteries)  
 $\$50 \times 500 \text{ patients} = \$25,000 \times \text{one level II stroke center} \times 4 \text{ years}$   
 $= \$100,000 \text{ for the first 4 year period and } \$25,000 \times \text{one level II}$   
 $\text{stroke center} \times 1 \text{ year} = \$25,000 \text{ annually thereafter.}$

Total cost for resuscitation equipment for one level II stroke center for the post-anesthesia recovery room (PAR) for the first 4 year period -  $\$215,940$  (letter a above) +  $\$100,000$  (letter b above) +  $\$1,642,395$  (letter c above) +  $\$24,000$  (letter d above) +  $\$200,000$  (letter e above) +  $\$100,000$  (letter f above) =  $\$2,282,335$  for the first 4 year period.

Total cost for resuscitation equipment for one level II stroke center for the post-anesthesia recovery room (PAR) for annually thereafter -  $\$55,525$  (letter a above) +  $\$25,000$  (letter b above) +  $\$1,500$  (letter c above) +  $\$6,000$  (letter d above) +  $\$50,000$  (letter e above) +  $\$25,000$  (letter f above) =  $\$163,025$  for annually thereafter.

**12) Laboratory Services -**

- a) Standard analyses of blood, urine and other body fluids- costs of materials  $\$200 \times 500 \text{ patients} = \$100,000 \times \text{one level II stroke center} \times 4 \text{ years} = \$400,000$  for the first 4 year period and  $\$200 \times 500 \text{ patients} \times \text{one level II stroke center} \times 1 \text{ year} = \$100,000$  annually thereafter.
- b) Blood typing and cross matching - centrifuge  $\$2000 \times \text{one level II stroke center} \times 1 \text{ year (the first year)} = \$2,000 + \$250$  for the annual upkeep and maintenance of the centrifuge  $\times \text{one level II stroke center} \times 3 \text{ years (years 2 through 4)} = \$750$  for a total of  $\$2,750$  for the first 4 year period and  $\$250$  for the annual upkeep and maintenance of the centrifuge  $\times \text{one level II stroke center} \times 1 \text{ year} = \$250$  annually thereafter.
- c) Coagulation studies -  $\$200 \text{ materials} \times 250 \text{ patients} = \$50,000 \times \text{one level II stroke center} \times 4 \text{ years} = \$200,000$  for the first 4 year period and  $\$200 \text{ materials} \times 250 \text{ patients} = \$50,000 \times \text{one level II stroke center} \times 1 \text{ year} = \$50,000$  annually thereafter.
- d) Blood bank or access to a community central blood bank and adequate hospital blood storage facilities - at the least blood storage refrigerators 1 large refrigerator/use of community central blood bank at  $\$15,000 \times \text{one level II stroke center} \times 1 \text{ year (the first year)} = \$15,000 + \$1,500$  for the annual upkeep and maintenance of the blood storage refrigerator  $\times \text{one level II stroke center} \times 3 \text{ years (years 2 through 4)} = \$4,500$  for a total of  $\$19,500$  for the first 4 year period and  $\$1,500$  for the annual upkeep and maintenance of the blood storage refrigerator  $\times \text{one level II stroke center} \times 1 \text{ year} = \$1,500$  annually thereafter.
- e) Blood gases and pH determinations - at least one blood gas analyzer and kit  $\$3000 \times \text{one level II stroke center} \times 4 \text{ years} = \$12,000$  for the first 4 year period and  $\$3,000 \times \text{one level II stroke}$

center X 1 year = \$3,000 annually thereafter.

f) Blood chemistries - test and kits average of \$350 X 100 patients = \$35,000 X one level II stroke center X 4 years = \$140,000 for the first 4 year period and \$350 X 100 patients X one level II stroke center X 1 year = \$35,000 annually thereafter.

Total costs for laboratory services for one level II stroke center for the first 4 year period - \$400,000 (letter a above) + \$ 2,750 (letter b above) + \$200,000 (letter c above) + \$19,500 (letter d above) + \$12,000 (letter e above) + \$140,000 (letter f above) = \$774,250 for the first year.

Total cost for laboratory services for one level II stroke center for annually thereafter - \$100,000 (letter a above) + \$250 (letter b above) + \$50,000 (letter c above) + \$1,500 (letter d above) + \$3,000 (letter e above) + \$35,000 (letter f above) = \$189,750 for annually thereafter.

Total cost for medical equipment for the first 4 year period - \$4,800 (number 1 above) + \$1,477,935 (number 2 above) + \$2,408,585 (number 3 above) + \$2,122,335 (number 4 above) + \$1,600,000 (number 5 above) + \$3,200,000 (number 6 above) + \$41,000 (number 7 above) + \$2,262,835 (number 8 above) + \$200,250 (number 9 above) + \$2,270,835 (number 10 above) + \$2,282,335 (number 11 above) + \$774,250 (number 12 above) = \$18,645,160 for the first 4 year period.

Total cost for medical equipment for annually thereafter - \$1,200 (number 1 above) + \$358,325 (number 2 above) + \$587,615 (number 3 above) + \$520,025 (number 4 above) + \$200,000 (number 5 above) + \$400,000 (number 6 above) + \$2,000 (number 7 above) + \$556,865 (number 8 above) + \$44,750 (number 9 above) + \$558,525 (number 10 above) + \$163,025 (number 11 above) + \$189,750 (number 12 above) = \$3,582,080 for annually thereafter.

D. The stroke center shall have support services to assist the patient's family from time of entry into the facility to time of discharge - at least 1 full time equivalent medical social worker \$66,000 annually X one level II stroke center X 4 years = \$264,000 for the first 4 year period and \$66,000 X one level II stroke center X 1 year = \$66,000 annually thereafter.

E. The stroke center shall have a stroke rehabilitation program or plan to refer those stroke patients that require rehabilitation to another facility or community agency that can provide necessary services - (at least 1 physical therapist \$74,075 annually X one level II stroke center X 4 years = \$296,300 for the first 4 year period) + (occupational therapist \$72,763 annually X one level II stroke center X 4 years = \$291,052 for the first 4 year period) + (speech therapist/pathologist \$67,834 annually X one level II stroke center X 4 years = \$271,336 for the first 4 year period) for a total of \$858,688 for the first 4 year period and \$74,075 + \$72,763 + \$67,834 = \$214,672 X one level II stroke center X 1 year = \$214,672 annually thereafter.

**F. Courses/conferences for physicians who are not board certified.**

- 1) National or international stroke course registration (\$1,200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level II stroke center X 4 years = \$0 for the first 4 year period and \$2,950 X no level II stroke center X 1 year = \$0 annually thereafter.
- 2) Regional stroke course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level II stroke center X 2 (1 conference every 2 years) = \$3,500 for the first 4 year period and \$1,750 X one level II stroke center X 1 year = \$1,750 annually thereafter.
- 3) State stroke course or conference - (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level II stroke center X 4 years = \$0 for the first 4 year period and \$1,150 X no level II stroke center X 1 year = \$0 annually thereafter.

**G. Courses/conferences for program manager**

- 1) National or international stroke course or conference - (\$1200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level II stroke center X 4 years = \$0 for the first 4 year period and \$2,950 X no level II stroke center X 1 year = \$0 annually thereafter.
- 2) Regional stroke course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level II stroke center X 2 (1 conference every 2 years) = \$3,500 for the first 4 year period and \$1,750 X one level II stroke center X 1 year = \$1,750 annually thereafter.
- 3) State stroke course or conference - (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level II stroke center X 4 years = \$0 for the first 4 year period and \$1,150 X no level II stroke center X 1 year = \$0 annually thereafter.

**H. Stroke registry -**

- 1) Computer with internet capability/access \$600 computer + internet fee \$100/month \$1,200 annually X one level II stroke center X 4 years = \$7,200 for the first 4 year period and \$1,800 X one level II stroke center X 1 year = \$1,800 annually thereafter.
- 2) Patient registrar - \$36,258 annually X one level II stroke center X 4 years = \$145,032 for the first 4 year period and \$36,258 X one level II stroke center X 1 year = \$36,258 annually thereafter.
- 3) Training to set up stroke registry system/program for data entry - \$200 annually X one level II stroke center X 4 years = \$800 for the first 4 year period and \$200 X one level II stroke center X 1 year = \$200 annually thereafter.

- I. Public education program to promote stroke prevention and stroke symptoms awareness - e.g. community health fairs costs of printing and advertisement costs (posters, brochures etc...) \$350 for each health fair x 12 health fairs annually = \$4200 annually X one level II stroke center X 4 years = \$16,800 for the first 4 year period and \$4,200 X one level II stroke center X 1 year = \$4,200 annually thereafter.
- J. Patient education program to promote stroke prevention and stroke symptoms awareness - printing costs of brochures etc... \$500 annually X one level II stroke center X 4 years = \$2,000 for the first 4 year period and \$500 X one level II stroke center X one year = \$500 annually thereafter.
- K. Professional education outreach program in catchment areas to provide training and other supports to improve care of stroke patients - e.g. hospitals sponsor at least 1 conference per year within their service area at the cost of \$2000 annually X one level II stroke center X 4 years = \$8,000 for the first 4 year period and \$2,000 X one level II stroke center X 1 year = \$2,000 annually thereafter.
- L. Stroke centers shall be actively involved in local and regional EMS systems by providing training and clinical educational resources - hospitals sponsor at least one conference per year within their area for EMS at the cost of \$2,000 annually X one level II stroke center X 4 years = \$8,000 for the first 4 year period and \$2,000 X one level II stroke center X 1 year = \$2,000 annually thereafter.
- M. A lighted designated helicopter landing area at the stroke center to accommodate incoming medical helicopters which shall be cordoned off at all times from the general public. The stroke center shall also have a landing area on the hospital premises no more than three (3) minutes from the emergency room - (construction of helipad estimate of \$36,000 X 1 helipad X one level II stroke center X 1 year (the first year) = \$36,000) + (maintenance and upkeep of helipad \$2,000 X 3 years (years 2 through 4) X one level II stroke center = \$6,000) for a total of \$42,000 for the first 4 year period for the helipad + (cordoning barrier \$4,300 X 1 year (the first year) X one level II stroke center = \$4,300) + \$500 for maintenance and upkeep of the cordoning barrier X 3 years (years 2 through 4) X one level II stroke center = \$1,500) for a total of \$5,800 for the first 4 year period for the cordoning barrier for a total of \$47,800 for the first 4 year period and \$2,000 for maintenance and upkeep of helipad + \$500 for maintenance and upkeep of the cordoning barrier = \$2,500 X 1 year X one level II stroke center = \$2,500 annually thereafter.

Total cost for one level II stroke center for the first 4 year period -  
 [\$32,436,472 letter A] + [\$5,119.40 letter B] + [\$18,645,160 letter C]  
 + [\$264,000 letter D] + [\$858,688 letter E] + [\$3,500 letter F] +  
 [\$3,500 letter G] + [\$153,032 letter H] + [\$16,800 letter I] +

[ $\$2,000$  letter J] + [ $\$8,000$  letter K] + [ $\$8,000$  letter L] + [ $\$47,800$  letter M] =  $\$52,452,071$  for the first 4 year period.

Total cost for one level II stroke center for annually thereafter - [ $\$8,109,118$  letter A] + [ $\$1,279.85$  letter B] + [ $\$3,582,080$  letter C] + [ $\$66,000$  letter D] + [ $\$214,672$  letter E] + [ $\$1,750$  letter F] + [ $\$1,750$  letter G] + [ $\$38,258$  letter H] + [ $\$4,200$  letter I] + [ $\$500$  letter J] + [ $\$2,000$  letter K] + [ $\$2,000$  letter L] + [ $\$2,500$  letter M] =  $\$12,026,107$  for annually thereafter.

It is expected that 2 level II stroke centers will be designated during the first 4 year period ( $\$104,904,142$ ) and that these same level II stroke centers will be designated again at some time (4 year intervals) annually thereafter ( $\$24,052,214$ ).

### 3. Level III Stroke Center.

#### A. Medical Professionals.

- 1) A physician experienced in diagnosing and treating cerebrovascular diseases -  $\$204,430$  annually X 4 years X one level III stroke center =  $\$817,720$  for the first 4 year period and  $\$204,430$  annually X one level III stroke center X 1 year =  $\$204,430$  annually thereafter.
- 2) At least one other healthcare professional or qualified individual credentialed in stroke patient care -  $\$126,046$  annually X 4 years X one level III stroke center =  $\$504,184$  for the first 4 year period and  $\$126,046$  X one level III stroke center X 1 year =  $\$126,046$  annually thereafter.
- 3) Stroke center medical director who is recommended to be a board certified or board admissible physician -  $\$204,430$  annually X 4 years X one level III stroke center =  $\$817,720$  for the first 4 year period and  $\$204,430$  annually X one level III stroke center X 1 year =  $\$204,430$  annually thereafter.
- 4) Stroke program manager/coordinator who is a registered nurse or qualified individual -  $\$126,046$  annually X 4 years X one level III stroke center =  $\$504,184$  for the first 4 year period and  $\$126,046$  annually X one level III stroke center X 1 year =  $\$126,046$  annually thereafter.
- 5) An internal medicine physician -  $\$181,823$  annually X 4 years X one level III stroke center =  $\$727,292$  for the first 4 year period and  $\$181,823$  annually X one level III stroke center X 1 year =  $\$181,823$  annually thereafter.
- 6) A diagnostic radiologist -  $\$402,539$  annually X 4 years X one level III stroke center =  $\$1,610,156$  for the first 4 year period and  $\$402,539$  annually X one level III stroke center X 1 year =  $\$402,539$  annually thereafter.
- 7) Medical director of the emergency department who is recommended to be a board certified or board-admissible physician -  $\$199,038$  annually X 4 years X one level III stroke center =  $\$796,152$  for the

- first 4 year period and \$199,038 X one level III stroke center X 1 year = \$199,038 annually thereafter.
- 8) Registered nurses in the emergency department - \$64,533 annually X 5 registered nurses in the emergency department X 4 years X one level III stroke center = \$1,290,660 for the first 4 year period and \$64,533 annually X 5 registered nurses in the emergency department X one level III stroke center X 1 year = \$322,665 annually thereafter.
  - 9) Emergency department physician credentialed for stroke care by the stroke center 24 hours a day, 7 days a week - \$244,973 annually X 3 emergency department physicians X 4 years X one level III stroke center = \$2,939,676 for the first 4 year period and \$244,973 annually X 3 emergency department physicians X one level III stroke center X 1 year = \$734,919 annually thereafter.
  - 10) Stroke unit medical director - \$177,560 annually X 4 years X one level III stroke center = \$710,240 for the first 4 year period and \$177,560 annually X one level III stroke center X 1 year = \$177,560 annually thereafter.
  - 11) Physician on duty or available 24 hours a day, 7 days a week in the stroke center stroke unit - \$177,560 annually X 3 physicians in the stroke center stroke unit X 4 years X one level III stroke center = \$2,130,720 for the first 4 year period and \$177,560 annually X 3 physicians in the stroke center stroke unit X one level III stroke center X 1 year = \$532,680 annually thereafter.
  - 12) Stroke center stroke unit shall have registered nurses and other essential personnel on duty 24 hours a day 7 days a week - \$65,097 annually for the registered nurse X 4 registered nurses in the stroke center stroke unit X 4 years X one level III stroke center = \$1,041,552 for the first 4 year period and \$65,097 annually for the registered nurse X 4 registered nurses in the stroke center stroke unit X one level III stroke center X 1 year = \$260,388 annually thereafter.
  - 13) Computerized tomography technologist - \$58,895 annually X 4 computerized tomography technologists X 4 years X one level III stroke center = \$942,320 for the first 4 year period and \$58,895 annually X 4 computerized tomography technologists X one level III stroke center X 1 year = \$235,580 annually thereafter.
  - 14) Neurologist/radiologist - average \$300,000 annually X 3 neurologists/radiologists X 4 years X one level III stroke center = \$3,600,000 for the first 4 year period and \$300,000 annually X 3 neurologists/radiologists X one level III stroke center X 1 year = \$900,000 annually thereafter.
  - 15) Transport nurse/radiology technician - averages \$62,000 annually X 4 years X one level III stroke center = \$248,000 for the first 4 year period and \$62,000 X one level III stroke center X 1 year = \$62,000 annually thereafter.

Total salary cost for medical professionals for one level III stroke center for the first 4 year period - \$817,720 (#1 above) + \$504,184 (#2 above) + \$817,720 (#3 above) + \$504,184 (#4 above) + \$727,292 (#5 above) + \$1,610,156 (#6 above) + \$796,152 (#7 above) + \$1,290,660 (#8 above) + \$2,939,676 (#9 above) + \$710,240 (#10 above) + \$2,130,720



(#11 above) + \$1,041,552 (#12 above) + \$942,320 (#13 above) + \$3,600,000 (#14 above) + \$248,000 (#15 above) = \$18,680,576 for the first 4 year period.

Total salary cost for medical professionals for one level III stroke center for annually thereafter - \$204,430 (#1 above) + \$126,046 (#2 above) + \$204,430 (#3 above) + \$126,046 (#4 above) + \$181,823 (#5 above) + \$402,539 (#6 above) + \$199,038 (#7 above) + \$322,665 (#8 above) + \$734,919 (#9 above) + \$177,560 (#10 above) + \$532,680 (#11 above) + \$260,388 (#12 above) + \$235,580 (#13 above) + \$900,000 (#14 above) + \$62,000 (#15 above) = \$4,670,144 for annually thereafter.

**B. Continuing education for level III stroke center staff.**

- 1) Level III stroke call roster member (emergency department physician) shall complete a minimum average of 8 hours of continuing education in cerebrovascular disease every 2 years - average of \$10.00 per hour for online training X 4 hours X 4 years X one level III stroke center = \$160 for the first 4 year period and \$10 X 4 hours X one level III stroke center X 1 year = \$40 annually thereafter.
- 2) Level III stroke call roster member (others as appropriate) shall complete a minimum average of 8 hours of continuing education in cerebrovascular disease every 2 years - average of \$10.00 per hour for online training X 4 hours X 4 years X one level III stroke center = \$160 for the first 4 year period and \$10 per hour for online training X 4 hours X one level III stroke center X 1 year = \$40 annually thereafter.
- 3) A level III stroke center medical director shall complete a minimum of 8 hours of continuing medical education every 2 years in the area of cerebrovascular disease - average of \$10.00 per hour for online training X 4 hours X 4 years X one level III stroke center = \$160 for the first 4 year period and \$10 per hour for online training X 4 hours X one level III stroke center X 1 year = \$40 annually thereafter.
- 4) A level III program manager/coordinator shall complete a minimum of 8 hours of continuing education every 2 years in cerebrovascular disease - average of \$39.99 annually for online training X 4 years X one level III stroke center = \$159.96 for the first 4 year period and \$39.99 X one level III stroke center X 1 year = \$39.99 annually thereafter.
- 5) Emergency department physicians in level III stroke centers shall complete a minimum average of 6 hours of continuing medical education in cerebrovascular disease every 2 years - average of \$10.00 per hour for online training X 3 emergency department physicians X 3 hours of continuing medical education X 4 years X one level III stroke center = \$360 for the first 4 year period and \$10.00 per hour for online training X 3 emergency department physicians X 3 hours of continuing medical education X one level III stroke center X 1 year = \$90 annually thereafter.

- 6) Registered nurses assigned to the emergency departments in level III stroke centers shall complete a minimum of 6 hours of continuing education in the area of cerebrovascular disease every 2 years - average of \$39.99 annually for online training X 5 registered nurses in the emergency department X 4 years X one level III stroke center = \$799.80 for the first 4 year period and \$39.99 annually for online training X 5 registered nurses in the emergency department X one level III stroke center X 1 year = \$199.95.
- 7) Registered nurses for level III stroke centers shall maintain core competencies in the care of the stroke patient annually as determined by the stroke center - average for nurse educator/supervisor \$78,500 annually X 4 years X one level III stroke center = \$314,000 for the first 4 year period and \$78,500 X one level III stroke center X 1 year = \$78,500 annually thereafter.

Total cost for continuing education for the first 4 year period - \$160 (#1 above) + 160 (#2 above) + \$160 (#3 above) + \$159.96 (#4 above) + \$360 (#5 above) + \$799.80 (#6 above) + \$314,000 (#7 above) = \$315,799.76 for the first 4 year period.

Total cost for continuing education for annually thereafter - \$40 (#1 above) + \$40 (#2 above) + \$40 (#3 above) + \$39.99 (#4 above) + \$90 (#5 above) + \$199.95 (#6 above) + \$78,500 (#7 above) = \$78,949.94 for annually thereafter.

### C. Medical Equipment.

- 1) Electronic communication devices for stroke call roster members – 2 electronic communication devices (cell phone and beeper/pager) X \$300 for the annual cost of each electronic communication device X 2 stroke call roster members carrying this device (one member on call and one back-up member) X 4 years X one level III stroke center = \$4,800 for the first 4 year period and 2 electronic communication devices (cell phone and beeper/pager) X \$300 each X 2 stroke call roster members carrying this device (one member on call and one back-up member) X one level III stroke centers X 1 year = \$1,200 annually thereafter.
- 2) Resuscitation equipment for the emergency department-
  - a) Laryngoscopes - at least 2 X \$300 each = \$600 X 4 years X one level III stroke center = \$2,400 for the first 4 year period and at least 2 X \$300 each X one level III stroke center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 25 packs X 4 years X one level III stroke center = \$25,000 for the first 4 year period and \$250 for a pack of 10 X 25 packs X one level III stroke center X 1 year = \$6,250 annually thereafter.
  - c) Bag-mask resuscitator - \$250 for a pack of 10 X 25 packs X 4

- years X one level III stroke center = \$25,000 for the first 4 year period and \$250 for a pack of 10 X 25 packs X one level III stroke center X 1 year = \$6,250 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level III stroke center for the first year = \$490 + \$150 upkeep and maintenance of air outlet X 3 years (years 2 through 4) X one level III stroke center = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 X 4 years X one level III stroke center = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 250 patients X 4 years X one level III stroke center = \$400 for the first 4 year period) + (masks \$2.40 X 250 patients X 4 years X one level III stroke center = \$2,400 for the first 4 year period) + (ambu bags \$10.50 X 50 X 4 years X one level III stroke center = \$2,100 for the first 4 year period) + (oxygen tank \$70 X 150 X 4 years X one level III stroke center = \$42,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 X 4 years X one level III stroke center = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for seven feet X 250 patients X 4 years X one level III stroke center = \$400 for the first 4 year period) for a total of \$54,740 for the first 4 year period and (air outlet upkeep and maintenance \$150 X one level III stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 15 = \$525 X one level III stroke center X 1 year = \$525) + (nasal cannula \$.40 X 250 patients X one level III stroke center X 1 year = \$100) + (masks \$2.40 X 250 X one level III stroke centers X 1 year = \$600) + (ambu bags \$10.50 X 50 = \$525 X one level III stroke centers X 1 year = \$525) + (oxygen tank \$70 X 150 = \$10,500 X one level III stroke center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 25 = \$750 X one level III stroke center X 1 year = \$750) + (oxygen tubing \$.40 for seven feet X 250 patients = \$100 X one level III stroke center X 1 year = \$100) for a total of \$13,250 annually thereafter.
- e) Mechanical ventilator - \$7,000 X one level III stroke center X 1 year (the first year) = \$7,000 for the first year and \$1,500 for the annual upkeep and maintenance of the mechanical ventilator X three years (years 2 through 4) X one level III stroke center = \$4,500 for a total of \$11,500 for the first 4 year period and \$1,500 for the annual upkeep and maintenance of the mechanical ventilators X one level III stroke center X 1 year = \$1,500 annually thereafter.
- f) Suction devices - suction devices canisters and tubing for wall suction \$50 X 250 patients X 4 years X one level III stroke center = \$50,000 for the first 4 year period and \$50 X 250 patients X one level III stroke center X 1 year = \$12,500 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level III stroke center = \$37,895 for the first year + \$1,500 for upkeep and maintenance X 3 years (years 2 through 4) X one level III stroke center = \$4,500 for a total of \$42,395 for

the first 4 year period and \$1,500 for the annual upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level III stroke center X 1 year = \$1,500 annually thereafter.

- h) Central line insertion equipment - \$600 X 150 patients = \$90,000 X 4 years X one level III stroke center = \$360,000 for the first 4 year period and \$600 X 150 patients = \$90,000 X one level III stroke center X 1 year = \$90,000 annually thereafter.
- i) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 250 patients = \$1,000) + (\$4.00 each for standard administration devices X 250 patients = \$1,000) + (\$4.00 each for standard intravenous catheters X 250 = \$1,000) = \$3,000 X 4 years X one level III stroke center = \$12,000 for the first 4 year period and \$3,000 X one level III stroke center X one year = \$3,000 annually thereafter.
- j) Intraosseous devices - needles \$25 each X 150 patients = \$3,750 X 4 years X one level III stroke center = \$15,000 for the first 4 year period and \$25 each X 150 patients = \$3,750 X one level III stroke center X 1 year = \$3,750 annually thereafter.
- k) Drugs necessary for emergency care - saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 250 patients = \$25,000 X four years X one level III stroke center = \$100,000 for the first 4 year period and \$25,000 X one level III stroke center X 1 year = \$25,000 annually thereafter.
- l) Two-way communication link with emergency medical service vehicles - \$1,200 apiece = \$1,200 X one level III stroke center X 1 year (the first year) = \$1,200 + \$150 for upkeep and maintenance X 3 years (years 2 through 4) X one level III stroke center = \$450 for a total of \$1,650 for the first 4 year period and \$150 for upkeep and maintenance X one level III stroke center X 1 year = \$150 annually thereafter.
- m) End-tidal carbon dioxide monitor - \$3,900 X one level III stroke center X 1 year (the first year) = \$3,900 + \$1500 for annual upkeep and maintenance of the end-tidal carbon dioxide monitor X 3 years (years 2 through 4) X one level III stroke center = \$4,500 for a total of \$8,400 for the first 4 year period and \$1,500 for the annual upkeep and maintenance of the end-tidal carbon dioxide monitor X one level III stroke center X 1 year = \$1,500 annually thereafter.
- n) Temperature control devices for patient and resuscitation fluids - \$270 pack of 10 (Bair Hugger Therapy) X 15 = \$4,050 X 4 years X one level III stroke center = \$16,200 for the first 4 year period and \$270 pack of 10 (Bair Hugger Therapy) X 15 = \$4,050 X one level III stroke center X 1 year = \$4,050 annually thereafter.
- o) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 250 patients = \$12,500 X one level III stroke center X 4 years = \$50,000 for the first 4 year period and \$12,500 X one level III

stroke center X 1 year = \$12,500 annually thereafter.

Total cost for resuscitation equipment for one level III stroke center for the emergency department for the first 4 year period – \$2,400 (letter a above) + \$25,000 (letter b above) + \$25,000 (letter c above) + \$54,740 (letter d above) + \$11,500 (letter e above) + \$50,000 (letter f above) + \$42,395 (letter g above) + \$360,000 (letter h above) + \$12,000 (letter i above) + \$15,000 (letter j above) + \$100,000 (letter k above) + \$1,650 (letter l above) + \$8,400 (letter m above) + \$16,200 (letter n above) + \$50,000 (letter o above) = \$774,285 for the first 4 year period.

Total cost for resuscitation equipment for one level III stroke center for the emergency department for annually thereafter- \$600 (letter a above) + \$6,250 (letter b above) + \$6,250 (letter c above) + \$13,250 (letter d above) + \$1,500 (letter e above) + \$12,500 (letter f above) + \$1,500 (letter g above) + \$90,000 (letter h above) + \$3,000 (letter i above) + \$3,750 (letter j above) + \$25,000 (letter k above) + \$150 (letter l above) + \$1,500 (letter m above) + \$4,050 (letter n above) + \$12,500 (letter o above) = \$181,800 for annually thereafter.

- 3) Stroke center stroke unit resuscitation equipment -
  - a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes - (laryngoscopes at least 2 X \$300 each = \$600 X 4 years X one level III stroke center = \$2,400 for the first 4 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 25 = \$6,250 X 4 years X one level III stroke center = \$25,000 for the first 4 year period) + (mechanical ventilator \$7000 X one level III stroke center X 1 year (the first year) = \$7,000 + \$1,500 for the annual upkeep and maintenance of the mechanical ventilator X 3 years (years 2 through 4) X one level III stroke center = \$4,500 for a total of \$11,500) for a total of \$31,900 for the first 4 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level III stroke center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 25 = \$6,250 X one level III stroke center X 1 year = \$6,250) + (mechanical ventilator \$1500 upkeep and maintenance X one level III stroke center X one year = \$1,500) for a total of \$8,350 annually thereafter.
  - b) Bag-mask resuscitator and sources of oxygen - (bag mask resuscitator \$250 for a pack of 10 X 25 packs = \$6,250 X 4 years X one level III stroke center = \$25,000 for the first 4 year period) + (air outlet \$70 X 7 = \$490 X 1 year (the first year) X one level III stroke center = \$490 for the first year + air outlet upkeep and maintenance \$150 X 3 years (years 2 through 4) X one level III stroke center = \$450 for a total of \$940 for air outlets for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X 4 years

X one level III stroke center = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 250 patients = \$100 X 4 years X one level III stroke center = \$400 for the first 4 year period) + (masks \$2.40 X 250 patients = \$600 X 4 years X one level III stroke center = \$2,400 for the first 4 year period) + (ambu bags \$10.50 X 50 patients = \$525 X 4 years X one level III stroke center = \$2,100 for the first 4 year period) + (oxygen tank \$70 X 150 patients = \$10,500 X 4 years X one level III stroke center = \$42,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 4 years X one level III stroke center = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X 4 years X one level III stroke center = \$400 for the first 4 year period) for a total of \$79,740 for the first 4 year period and (bag mask resuscitator \$250 for a pack of 10 X 25 packs = \$6,250 X one level III stroke center X 1 year = \$6,250) + (air outlet \$150 for upkeep and maintenance of air outlet X one level III stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level III stroke center X 1 year = \$875) + (nasal cannula \$.40 X 250 patients = \$100 X one level III stroke center X 1 year = \$100) + (masks \$2.40 X 250 patients = \$600 X one level III stroke center X 1 year = \$600) + (ambu bags \$10.50 X 50 patients = \$525 X one level III stroke center X 1 year = \$525) + (oxygen tank \$70 X 150 patients = \$10,500 X one level III stroke center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 25 = \$750 X one level III stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X one level III stroke center X 1 year = \$100) = for a total of \$19,850 annually thereafter.

- c) Suction devices - suction devices canisters and tubing for wall suction = \$50 X 250 patients = \$12,500 X 4 years X one level III stroke center = \$50,000 for the first 4 year period and \$12,500 X one level III stroke center X 1 year = \$12,500 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry \$800 X 250 patients = \$200,000 X 4 years X one level III stroke center = \$800,000) + (electrocardiograph, cardiac monitor and defibrillator \$37,895 X one year (first year) X one level III stroke center = \$37,895 + \$1500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X 3 years (years 2 through 4) X one level III stroke center = \$4,500 for a total of \$42,395) for a total of \$842,395 for the first 4 year period and (telemetry \$800 X 250 patients = \$200,000 X one level III stroke center X 1 year = \$200,000) + (\$1500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level III stroke center X 1 year = \$4,500) for a total of \$204,500 annually thereafter.
- e) All standard intravenous fluids and administration devices and intravenous catheters - (all standard intravenous fluids \$4.00 each X 250 = \$1,000) + (all standard administration devices \$4.00 each X 250 = \$1,000) + (all standard intravenous catheters \$4.00 each X 250 = \$1,000) = \$3,000 X 4 years X one level III stroke center =

\$12,000 for the first 4 year period and \$3,000 X one level III stroke center X 1 year = \$3,000 annually thereafter.

- f) Drugs necessary for emergency care - saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 250 patients = \$25,000 X 4 years X one level III stroke center = \$100,000 for the first 4 year period and \$100 X 250 patients X one level III stroke center X 1 year = \$25,000 annually thereafter.
- g) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 250 patients = \$12,500 X one level III stroke center X 4 years = \$50,000 for the first 4 year period and \$12,500 X one level III stroke center X 1 year = \$12,500 annually thereafter.

Total cost for resuscitation equipment for one level III stroke center for the stroke center stroke unit for the first 4 year period - \$31,900 (letter a above) + \$79,740 (letter b above) + \$50,000 (letter c above) + \$842,395 (letter d above) + \$12,000 (letter e above) + \$100,000 (letter f above) + \$50,000 (letter g above) = \$1,166,035 for the first 4 year period.

Total cost for resuscitation equipment for one level III stroke center for the stroke center stroke unit for annually thereafter - \$8,350 (letter a above) + \$19,850 (letter b above) + \$12,500 (letter c above) + \$204,500 (letter d above) + \$3,000 (letter e above) + \$25,000 (letter f above) + \$25,000 (letter g above) + \$12,500 (letter h above) = \$310,700 for annually thereafter.

- 4) In-house computerized tomography - average cost of CT machine is 1,000,000 X one level III stroke center X 1 year (first year) = \$1,000,000 + \$200,000 for the upkeep and maintenance of CT machine X one level III stroke center X 3 years (years 2 through 4) = \$600,000 for a total of \$1,600,000 for the first 4 year period and \$200,000 for the upkeep and maintenance of CT machine X one level III stroke center X 1 year = \$200,000 annually thereafter.
- 5) Resuscitation equipment for the radiology department -
  - a) Laryngoscopes - at least 2 X \$300 each = \$600 X 4 years X one level III stroke center = \$2,400 for the first 4 year period and \$600 X one level III stroke center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 25 = \$6,250 X 4 years X one level III stroke center = \$25,000 for the first 4 year period and \$6,250 X one level III stroke center X 1 year = \$6,250 annually thereafter.
  - c) Bag -mask resuscitator - \$250 for a pack of 10 X 25 packs =

- \$6,250 X 4 years X one level III stroke center = \$25,000 for the first 4 year period and \$6,250 X one level III stroke center X 1 year = \$6,250 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X 1 year (year 1) X one level III stroke center = \$490 + \$150 upkeep and maintenance of air outlet X 3 years (years 2 through 4) X one level III stroke center = \$450 for a total of \$940 for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X 4 years X one level III stroke center = \$3,500 for the first 4 year period) + (nasal cannula \$.40 X 250 patients = \$100 X 4 years X one level III stroke center = \$400 for the first 4 year period) + (masks \$2.40 X 250 patients = \$600 X 4 years X one level III stroke center = \$2,400 for the first 4 year period) + (ambu bags \$10.50 X 50 = \$525 X 4 years X one level III stroke center = \$2,100 for the first 4 year period) + (oxygen tank \$70 X 150 = \$10,500 X 4 years X one level III stroke center = \$42,000) + (regulator for oxygen tank \$30 X 25 = \$750 X 4 years X one level III stroke centers = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X 4 years X one level III stroke center = \$400 for the first 4 year period) for a total of \$54,740 for the first 4 year period and (air outlet upkeep and maintenance \$150 X one level III stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 15 = \$525 X one level III stroke center X 1 year = \$525) + (nasal cannula \$.40 X 250 patients = \$100 X one level III stroke center X 1 year = \$100) + (masks \$2.40 X 250 patients = \$600 X one level III stroke center = \$600) + (ambu bags \$10.50 X 50 = \$525 X one level III stroke center X 1 year = \$525) + (oxygen tank \$70 X 150 = \$10,500 X one level III stroke center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 25 = \$750 X one level III stroke center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X one level III stroke center X 1 year = \$100) for a total of \$13,250 annually thereafter.
- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 250 patients = \$12,500 X 4 years X one level III stroke center = \$50,000 for the first 4 year period and \$50 X 250 patients X one level III stroke center X 1 year = \$12,500 annually thereafter.
- f) Telemetry - average of \$800 X 250 patients = \$200,000 X 4 years X one level III stroke center = \$800,000 for the first 4 year period and \$200,000 X one level III stroke center X one year = \$200,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - (\$37,895 X 1 year (first year) X one level III stroke center = \$37,895 + \$1,500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X 3 years (years 2 through 4) X one level III stroke center = \$4,500) for a total of \$42,395 for the first 4 year period and \$1,500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level III stroke center X 1 year = \$1,500 annually thereafter.



- h) All standard intravenous fluids - \$4.00 each X 250 patients X 4 years X one level III stroke center = \$4,000 for the first 4 year period and \$4.00 each X 250 patients X one level III stroke center X 1 year = \$1,000 annually thereafter.
- i) All standard administration devices - \$4.00 each X 250 patients X 4 years X one level III stroke center = \$4,000 for the first 4 year period and \$4.00 each X 250 patients X one level III stroke center X 1 year = \$1,000 annually thereafter.
- j) All standard intravenous catheters - \$4.00 each X 250 patients X 4 years X one level III stroke center = \$4,000 for the first 4 year period and \$4.00 each X 250 patients X one level III stroke center X 1 year = \$1,000 annually thereafter.
- k) Drugs necessary for emergency care - saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 250 patients = \$25,000 X 4 years X one level III stroke center = \$100,000 for the first 4 year period and \$25,000 X one level III stroke center X 1 year = \$25,000 annually thereafter.
- l) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 250 patients = \$12,500 X one level III stroke center X 4 years = \$50,000 for the first 4 year period and \$12,500 X one level III stroke center X 1 year = \$12,500 annually thereafter.

Total cost for resuscitation equipment for one level III stroke center for the radiology department for the first 4 year period – \$2,400 (letter a above) + \$25,000 (letter b above) + \$25,000 (letter c above) + \$54,740 (letter d above) + \$50,000 (letter e above) + \$800,000 (letter f above) + \$42,395 (letter g above) + \$4,000 (letter h above) + \$4,000 (letter i above) + \$4,000 (letter j above) + \$100,000 (letter k above) + \$50,000 (letter l above) = \$1,161,535 for the first 4 year period.

Total cost for resuscitation equipment for one level III stroke center for the radiology department for annually thereafter - \$600 (letter a above) + \$6,250 (letter b above) + \$6,250 (letter c above) + \$13,250 (letter d above) + \$12,500 (letter e above) + \$200,000 (letter f above) + \$1,500 (letter g above) + \$1,000 (letter h above) + \$1,000 (letter i above) + \$1,000 (letter j above) + \$25,000 (letter k above) + \$12,500 (letter l above) = \$280,850 for annually thereafter.

**6) Laboratory Services -**

- a) Standard analyses of blood, urine and other body fluids - costs of materials \$200 X 250 patients = \$50,000 X 4 years X one level III stroke center = \$200,000 for the first 4 year period and \$50,000 X one level III stroke center X 1 year = \$50,000 annually thereafter.
- b) Blood typing and cross matching - centrifuge \$2000 X 1 year (first year) X one level III stroke center = \$2,000 + \$250 for the upkeep and maintenance of the centrifuge X 3 years (years 2 through 4) X one level III stroke center = \$750 for a total of \$2,750 for the first 4

year period and \$250 for the upkeep and maintenance of the centrifuge X one level III stroke center X 1 year = \$250 annually thereafter.

- c) Coagulation studies - \$200 materials X 125 patients = \$25,000 X 4 years X one level III stroke center = \$100,000 for the first 4 year period and \$200 materials X 125 patients X one level III stroke center X one year = \$25,000 annually thereafter.
- d) Blood bank or access to a community central blood bank and adequate hospital blood storage facilities - at the least blood storage refrigerators 1 large refrigerator/use of community central blood bank at \$15,000 X 1 year (year 1) X one level III stroke center = \$15,000 + \$1,500 for upkeep and maintenance X 3 years (years 2 through 4) X one level III stroke center = \$4,500 for a total of \$19,500 the first 4 year period and \$1500 X one level III stroke center X 1 year = \$1,500 annually thereafter.
- e) Blood gases and pH determinations - at least 1 blood gas analyzer and kit \$3000 X 4 years X one level III stroke center = \$12,000 for the first 4 year period and \$3,000 X one level III stroke center X 1 year = \$3,000 annually thereafter.
- f) Blood chemistries - test and kits an average of \$350 X 100 patients = \$35,000 X 4 years X one level III stroke center = \$140,000 for the first 4 year period and \$35,000 X one level III stroke center X 1 year = \$35,000 annually thereafter.

Total cost for laboratory services for one level III stroke center for the first 4 year period - \$200,000 (letter a above) + \$2,750 (letter b above) + \$100,000 (letter c above) + \$19,500 (letter d above) + \$12,000 (letter e above) + \$140,000 (letter f above) = \$474,250 for the first 4 year period.

Total cost for laboratory services for one level III stroke center for annually thereafter - \$50,000 (letter a above) + \$250 (letter b above) + \$25,000 (letter c above) + \$1,500 (letter d above) + \$3,000 (letter e above) + \$35,000 (letter f above) = \$114,750 for annually thereafter.

Total cost for medical equipment for one level III stroke center for the first 4 year period - \$4,800 (#1 above) + \$774,285 (#2 above) + \$1,166,035 (#3 above) + \$1,600,000 (#4 above) + \$1,161,535 (#5 above) + \$474,250 (#6 above) = \$5,180,905 for the first 4 year period.

Total cost for medical equipment for annually thereafter - \$1,200 (#1 above) + \$181,800 (#2 above) + \$310,700 (#3 above) + \$200,000 (#4 above) + \$280,850 (#5 above) + \$114,750 (#6 above) = \$1,089,300 for annually thereafter.

- D. The stroke center shall have support services to assist the patient's family from time of entry into the facility to time of discharge - 1 full time equivalent medical social worker \$66,000 annually X 4 years X one level

III stroke center = \$264,000 for the first 4 year period and \$66,000 X one level III stroke center X 1 year = \$66,000 annually thereafter.

E. The stroke center shall have a stroke rehabilitation program or plan to refer those stroke patients that require rehabilitation to another facility or community agency that can provide necessary services - physical therapist \$74,075 annually + occupational therapist \$72,763 annually + speech therapist/pathologist \$67,834 annually = \$214,672 X 4 years X one level III stroke center = \$858,688 for the first 4 year period and \$214,672 X one level III stroke center X 1 year = \$214,672.

F. Courses/conferences for the stroke medical director who is not board certified/board admissible/attend one national, regional or state meeting every 3 years in cerebrovascular disease.

- a) National or international stroke course or conference - (\$1200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level III stroke center X 4 years = \$0 for the first year and \$2,950 X no level III stroke center X 1 year = \$0 annually thereafter.
- b) Regional stroke course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level III stroke center X 1 course (1 course required every 3 years) = \$1,750 for the first 4 year period and \$1,750 X one level III stroke center X 1 year = \$1,750 annually thereafter.
- c) State stroke course or conference (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level III stroke center X 4 years = \$0 for the first 4 year period and \$1,150 X no level III stroke center X 1 year = \$0 annually thereafter.

G. Stroke registry

- a) Computer with internet capability/access \$600 computer + internet fee \$100/month \$1200 annually X 4 years X one level III stroke center = \$7,200 for the first 4 year period and \$1,800 X one level III stroke center X 1 year = \$1,800 annually thereafter.
- b) Patient registrar - \$36,258 annually X 4 years X one level III stroke center = \$145,032 for the first 4 year period and \$36,258 X one level III stroke center X 1 year = \$36,258 annually thereafter.
- c) Training to set up stroke registry system/program for data entry- \$200 annually X 4 years X one level III stroke center = \$800 for the first 4 year period and \$200 X one level III stroke center X 1 year = \$200 annually thereafter.

H. Public education program to promote stroke prevention and stroke symptoms awareness- e.g. community health fairs costs of printing and advertisement costs (posters, brochures etc...) \$350 for each health fair X 12 health fairs annually = \$4,200 annually X 4 years X one level III stroke center = \$16,800 for the first 4 year period and \$4,200 X one level III stroke center X 1 year = \$4,200 annually thereafter.

- I. Patient education program to promote stroke prevention and stroke symptoms awareness - printing costs of brochures etc... \$500 annually X 4 years X one level III stroke center = \$2,000 for the first 4 year period and \$500 X one level III stroke center X 1 year = \$500 annually thereafter.**
- J. Professional education outreach program in catchment areas to provide training and other supports to improve care of stroke patients-e.g. hospitals sponsor at least 1 conference per year within their service area at the cost of \$2000 annually X 4 years X one level III stroke center = \$8,000 for the first 4 year period and \$2,000 X one level III stroke center X 1 year = \$2,000 annually thereafter.**
- K. Stroke centers shall be actively involved in local and regional EMS systems by providing training and clinical educational resources - hospitals sponsor at least 1 conference per year within their area for EMS at the cost of \$2000 annually X 4 years X one level III stroke center = \$8,000 for the first 4 year period and \$2,000 X one level III stroke center X 1 year = \$2,000 annually thereafter.**
- L. A lighted designated helicopter landing area at the stroke center to accommodate incoming medical helicopters which shall be cordoned off at all times from the general public. The stroke center shall also have a landing area on the hospital premises no more than three (3) minutes from the emergency room - (construction of helipad estimate of \$36,000 X 1 helipad X one level III stroke center X 1 year (the first year) = \$36,000) + (maintenance and upkeep of helipad \$2,000 X 3 years (years 2 through 4) X one level III stroke center = \$6,000) for a total of \$42,000 for the first 4 year period for the helipad + (cordoning barrier \$4,300 X 1 year (the first year) X one level III stroke center = \$4,300) + \$500 for maintenance and upkeep of the cordoning barrier X 3 years (years 2 through 4) X one level III stroke center = \$1,500) for a total of \$5,800 for the first 4 year period for the cordoning barrier for a total of \$47,800 for the first 4 year period and \$2,000 for maintenance and upkeep of helipad + \$500 for maintenance and upkeep of the cordoning barrier = \$2,500 X 1 year X one level III stroke center = \$2,500 annually thereafter.**

**Total cost for one level III stroke center for the first 4 year period -**  
 [\$18,680,576 letter A above] + [\$315,799.76 letter B above] + [\$5,180,905 letter C above] + [\$264,000 letter D above] + [\$858,688 letter E above] +  
 [\$1,750 letter F above] + [\$153,032 letter G above] + [\$16,800 letter H above]  
 + [\$2,000 letter I above] + [\$8,000 letter J above] + [\$8,000 letter K above] =  
 [\$47,800 letter L above] = \$25,537,350 for the first 4 year period.

**Total cost for one level III stroke center for annually thereafter -** [\$4,670,144 letter A above] + [\$78,949.94 letter B above] + [\$1,089,300 letter C above] +  
 [\$66,000 letter D above] + [\$214,672 letter E above] + [\$1,750 letter F above]  
 + [\$38,258 letter G above] + [\$4,200 letter H above] + [\$500 letter I above] +

**[\$2,000 letter J above] + [\$2,000 letter K above] + [\$2,500 letter L above] = \$6,170,273.90 for annually thereafter.**

**It is expected that 4 level III stroke centers will be designated during the first 4 year period (\$102,149,400) and those 4 same level III stroke centers and 1 additional level III stroke center will be designated again at some time (4 year intervals) annually thereafter (\$30,851,369.50).**

**4. Level IV stroke center.**

**A. Medical Professionals.**

- 1) A physician experienced in diagnosing and treating cerebrovascular diseases - \$204,430 annually X 4 years X one level IV stroke center = \$817,720 for the first 4 year period and \$204,430 annually X one level IV stroke center X 1 year = \$204,430 annually thereafter.**
- 2) A least one other health care professional or qualified individual credentialed in stroke patient care - \$126,046 annually X 4 years X one level IV stroke center = \$504,184 for the first 4 year period and \$126,046 annually X one level IV stroke center X 1 year = \$126,046 annually thereafter.**
- 3) Stroke center medical director who is recommended to be a board certified or board admissible physician - \$204,430 annually X 4 years X one level IV stroke center = \$817,720 for the first 4 year period and \$204,430 X one level IV stroke center X 1 year = \$204,430 annually thereafter.**
- 4) Stroke program manager/coordinator who is a registered nurse or qualified individual - \$126,046 annually X 4 years X one level IV stroke center = \$504,184 for the first 4 year period and \$126,046 annually X one level IV stroke center X 1 year = \$126,046 annually thereafter.**
- 5) Medical director of the emergency department who is recommended to be a board certified or board-admissible physician - \$199,038 X 4 years X one level IV stroke center = \$796,152 for the first 4 year period and \$199,038 X one level IV stroke center X 1 year = \$199,038 annually thereafter.**
- 6) Registered nurses in the emergency department - \$64,533 annually X 3 registered nurses X 4 years X one level IV stroke center = \$774,396 for the first 4 year period and \$64,533 annually X 3 registered nurses X one level IV stroke center X 1 year = \$193,599 annually thereafter.**
- 7) Emergency department physician credentialed for stroke care by the stroke center 24 hours a day, 7 days a week - \$244,973 annually X 3 emergency department physicians X 4 years X one level IV stroke center = \$2,939,676 for the first 4 year period and \$244,973 annually X 3 emergency department physicians X one level IV stroke center X 1 year = \$734,919 annually thereafter.**

Total salary cost for medical professionals for one level IV stroke center for the first 4 year period - [\$817,720 number 1 above] + [\$504,184 number 2 above] + [\$817,720 number 3 above] + [\$504,184 number 4 above] + [\$796,152 number 5 above] + [\$774,396 number 6 above] + [\$2,939,676 number 7 above] = \$7,154,032 for the first 4 year period.

Total salary cost for medical professionals for one level IV stroke center for annually thereafter - [\$204,430 number 1 above] + [\$126,046 number 2 above] + [\$204,430 number 3 above] + [\$126,046 number 4 above] + [\$199,038 number 5 above] + [\$193,599 number 6 above] + [\$734,919 number 7 above] = \$1,788,508 for annually thereafter.

**B. Continuing education costs for level IV stroke center staff.**

- 1) Level IV stroke call roster member (emergency department physician) shall complete a minimum average of 8 hours of continuing education in cerebrovascular disease every 2 years - average of \$10.00 per hour for online training X 4 hours X 4 years X one level IV stroke center = \$160 for the first 4 year period and \$10 X 4 hours X one level IV stroke center X 1 year = \$40 annually thereafter.
- 2) Level IV stroke call roster member (others as appropriate) shall complete a minimum average of 8 hours of continuing education in cerebrovascular disease every 2 years - average of \$10.00 per hour for online training X 4 hours X 4 years X one level IV stroke center = \$160 for the first 4 year period and \$10 X 4 hours X one level IV stroke center X 1 year = \$40 annually.
- 3) A level IV stroke center medical director shall complete a minimum of 8 hours of continuing medical education every 2 years in the area of cerebrovascular disease - average of \$10.00 per hour for online training X 4 hours X 4 years X one level IV stroke center = \$160 for the first 4 year period and \$10 X 4 hours X one level IV stroke center X 1 year = \$40 annually.
- 4) A level IV program manager/coordinator shall complete a minimum of 8 hours of continuing education every 2 years in cerebrovascular disease - average of \$39.99 annually for online training X 4 years X one level IV stroke center = \$159.96 for the first 4 year period and \$39.99 annually X one level IV stroke center X one year = \$39.99 annually thereafter.
- 5) Emergency department physicians in level IV stroke centers shall complete a minimum average of 6 hours of continuing medical education in cerebrovascular disease every 2 years - average of \$10.00 per hour for online training X 3 emergency department physicians X 3 hours of continuing medical education X 4 years X one level IV stroke center = \$360 for the first 4 year period and \$10 per hour for online training X 3 emergency department physicians X 3 hours of continuing medical education X one level IV stroke center X one year = \$90 annually thereafter.

- 6) Registered nurses assigned to the emergency departments in level IV stroke centers shall complete a minimum of 6 hours of continuing education in the area of cerebrovascular disease every 2 years - average of \$39.99 annually for online training X 5 registered nurses in the emergency department X 4 years X one level IV stroke center = \$799.80 for the first 4 year period and \$39.99 X 5 registered nurses X one level IV stroke center X 1 year = \$199.95 annually thereafter.

Total cost for continuing education for one level IV stroke center for the first 4 year period - [\$160 number 1 above] + [\$160 number 2 above] + [\$160 number 3 above] + [\$159.96 number 4 above] + [\$360 number 5 above] + [\$799.80 number 6 above] = \$1,799.76 for the first 4 year period.

Total cost for continuing education for one level IV stroke center for annually thereafter - [\$40 number 1 above] + [\$40 number 2 above] + [\$40 number 3 above] + [\$39.99 number 4 above] + [\$90 number 5 above] + [\$199.95 number 6 above] = \$449.94 for annually thereafter.

#### **C. Medical Equipment.**

- 1) Electronic communication devices for stroke call roster members - 2 electronic communication devices (cell phone and beeper/pager X \$300 for the annual cost of each electronic communication device X 2 stroke call roster members carrying this device (one member on call and one back up member) X 4 years X one level IV stroke center = \$4,800 for the first 4 year period and 2 electronic communication devices (cell phone and beeper/pager) X \$300 for the annual cost of each electronic communication device X 2 stroke call roster members carrying this device (one member on call and one back-up member) X one level IV stroke center X 1 year = \$1,200 annually thereafter.
- 2) Resuscitation equipment for the emergency department -
  - a) Laryngoscopes - at least 2 X \$300 each = \$600 X 4 years X one level IV stroke center = \$2,400 for the first 4 year period and at least 2 X \$300 each X one level IV stroke center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 25 packs X 4 years X one level IV stroke center = \$25,000 for the first 4 year period and \$250 for a pack of 10 X 25 packs X one level IV stroke center X 1 year = \$6,250 annually thereafter.
  - c) Bag-mask resuscitator - \$250 for a pack of 10 x 25 packs X 4 years X one level IV stroke center = \$25,000 for the first 4 year period and \$250 for a pack of 10 X 25 packs X one level IV stroke center = \$6,250 annually thereafter.
  - d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level IV stroke center for the first year = \$490 + \$150 upkeep and maintenance of air outlet X 3 years X one level IV stroke center = \$450 for a total of \$940 for air outlets for the first 4 year period) + (regulator for air outlet \$35 X 25 = \$875 X 4 years X one level IV stroke center =

\$3,500 for the first four year period) + (nasal cannula \$.40 X 250 patients = \$100 X 4 years X one level IV stroke center = \$400 for the first 4 year period) + (masks \$2.40 X 250 patients = \$600 X 4 years X one level IV stroke center = \$2,400 for the first 4 year period) + (ambu bags \$10.50 X 50 = \$525 X 4 years X one level IV stroke center = \$2,100 for the first 4 year period) + (oxygen tank \$70 X 150 = \$10,500 X 4 years X one level IV stroke center = \$42,000 for the first 4 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 4 years X one level IV stroke center = \$3,000 for the first 4 year period) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X 4 years X one level IV stroke center = \$400 for the first 4 year period) for a total of \$54,740 for the first 4 year period and (air outlet upkeep and maintenance \$150 X one level IV stroke center X 1 year = \$150) + (regulator for air outlet \$35 X 15 = \$525 X one level IV stroke center X 1 year = \$525) + (nasal cannula \$.40 X 250 patients = \$100 X one level IV stroke center X one year = \$100) + (masks \$2.40 X 250 = \$600 X one level IV stroke center X 1 year = \$600) + (ambu bags \$10.50 X 50 = \$525 X one level IV stroke center X 1 year = \$525) + (oxygen tank \$70 X 150 = \$10,500 X one level IV stroke center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 25 = \$750 X one level IV stroke center X 1 year = \$750) + (oxygen tubing \$.40 for seven feet X 250 patients = \$100 X one level IV stroke center X 1 year = \$100) for a total of \$13,250 annually thereafter.

- e) Suction devices - suction device canisters and tubing for wall suction \$50 X 250 patients = \$12,500 X 4 years X one level IV stroke center = \$50,000 for the first 4 year period and \$50 X 250 patients X one level IV stroke center X one year = \$12,500 annually thereafter.
- f) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level IV stroke center = \$37,895 for the first year + \$1,500 for upkeep and maintenance X 3 years (years 2 through 4) X one level IV stroke center = \$4,500 for a total of \$42,395 for the first 4 year period and \$1,500 for the annual upkeep, maintenance and possible replacement X one level IV stroke center X 1 year = \$1,500 annually thereafter.
- g) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 250 patients = \$1,000) + (\$4.00 each for standard administration devices X 250 patients = \$1,000) + (\$4.00 each for standard intravenous catheters X 250 patients = \$1,000) = \$3,000 X 4 years X one level IV stroke center = \$12,000 for the first 4 year period and \$3,000 X one level IV stroke center X 1 year = \$3,000 annually thereafter.
- h) Intraosseous devices - needles \$25 each X 150 patients = \$3,750 X 4 years X one level IV stroke center = \$15,000 for the first 4 year period and \$25 each X 150 patients = \$3,750 X one level IV stroke center X 1 year = \$3,750 annually thereafter.
- i) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 250 patients =



$\$25,000 \times 4 \text{ years} \times \text{one level IV stroke center} = \$100,000$  for the first 4 year period and  $\$100 \times 250 \text{ patients} \times \text{one level IV stroke center} \times 1 \text{ year} = \$25,000$  annually thereafter.

- j) Two-way communication link with emergency medical service vehicles -  $\$1,200$  apiece =  $\$1,200 \times \text{one level IV stroke center} \times 1 \text{ year (the first year)} = \$1,200 + \$150$  for upkeep and maintenance  $\times 3 \text{ years (years 2 through 4)} \times \text{one level IV stroke center} = \$450$  for a total of  $\$1,650$  for the first 4 year period and  $\$150 \times \text{one level IV stroke center} \times 1 \text{ year} = \$150$  annually thereafter.
- k) End-tidal carbon dioxide monitor -  $\$3900 \times \text{one level IV stroke center} \times 1 \text{ year (the first year)} = \$3,900 + \$1,500$  for the annual upkeep and maintenance  $\times \text{one level IV stroke center} \times 3 \text{ years (years 2 through 4)} = \$4,500$  for a total of  $\$8,400$  for the first 4 year period and  $\$1500 \times \text{one level IV stroke center} \times 1 \text{ year} = \$1,500$  annually thereafter.
- l) Temperature control devices for patient and resuscitation fluids  $\$270$  pack of 10 (Bair Hugger Therapy)  $\times 15 = \$4,050 \times 4 \text{ years} \times \text{one level IV stroke center} = \$16,200$  for the first 4 year period and  $\$270$  pack of 10 (Bair Hugger Therapy)  $\times 15 = \$4,050 \times \text{one level IV stroke center} \times 1 \text{ year} = \$4,050$  annually thereafter.
- m) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries)  $\$50 \times 250 \text{ patients} = \$12,500 \times \text{one level III stroke center} \times 4 \text{ years} = \$50,000$  for the first 4 year period and  $\$12,500 \times \text{one level III stroke center} \times 1 \text{ year} = \$12,500$  annually thereafter.

Total cost for resuscitation equipment for one level IV stroke center for the emergency department for the first 4 year period –  $\$2,400$  (letter a above) +  $\$25,000$  (letter b above) +  $\$25,000$  (letter c above) +  $\$54,740$  (letter d above) +  $\$50,000$  (letter e above) +  $\$42,395$  (letter f above) +  $\$12,000$  (letter g above) +  $\$15,000$  (letter h above) +  $\$100,000$  (letter i above) +  $\$1,650$  (letter j above) +  $\$8,400$  (letter k above) +  $\$16,200$  (letter l above) +  $\$50,000$  (letter m above) =  $\$402,785$  for the first 4 year period.

Total cost for resuscitation equipment for one level IV stroke center for the emergency department for annually thereafter -  $\$600$  (letter a above) +  $\$6,250$  (letter b above) +  $\$6,250$  (letter c above) +  $\$13,250$  (letter d above) +  $\$12,500$  (letter e above) +  $\$1,500$  (letter f above) +  $\$3,000$  (letter g above) +  $\$3,750$  (letter h above) +  $\$25,000$  (letter i above) +  $\$150$  (letter j above) +  $\$1,500$  (letter k above) +  $\$4,050$  (letter l above) +  $\$12,500$  (letter m above) =  $\$90,300$  for annually thereafter.

**3) Laboratory Services -**

- a) Standard analyses of blood, urine and other body fluids - costs of

- materials \$200 X 250 patients = \$50,000 X 4 years X one level IV stroke center = \$200,000 for the first 4 year period and \$50,000 X one level IV stroke center X 1 year = \$50,000 annually thereafter.
- b) Coagulation studies - \$200 materials X 250 patients = \$50,000 X 4 years X one level IV stroke center = \$200,000 for the first 4 year period and \$50,000 X one level IV stroke center X 1 year = \$50,000 annually thereafter.
- c) Blood bank or access to a community central blood bank and adequate hospital blood storage facilities - at the least blood storage refrigerators 1 large refrigerator/use of community central blood bank at \$15,000 X one level IV stroke center X 1 year (the first year = \$15,000 for the first year + \$1,500 X 3 years (years 2 through 4) X one level IV stroke center = \$4,500 for a total of \$19,500 for the first 4 year period and \$1,500 X one level IV stroke center X 1 year = \$4,500 annually thereafter.
- d) Blood gases and pH determinations - at least 1 blood gas analyzer and kit \$3000 X 4 years X one level IV stroke center = \$12,000 for the first 4 year period and \$3,000 X one level IV stroke center X 1 year = \$3,000 annually thereafter.
- e) Blood chemistries - test and kits average of \$350 X 100 patients = \$35,000 X 4 years X one level IV stroke center = \$140,000 for the first 4 year period and \$35,000 X one level IV stroke center X 1 year = \$35,000 annually thereafter.

Total cost for laboratory services for one level IV stroke center for the first 4 year period – \$200,000 (letter a above) + \$200,000 (letter b above) + \$19,500 (letter c above) + \$12,000 (letter d above) + \$140,000 (letter e above) = \$571,500 for the first 4 year period.

Total cost for laboratory services for one level IV stroke center for annually thereafter - \$50,000 (letter a above) + \$50,000 (letter b above) + \$4,500 (letter c above) + \$3,000 (letter d above) + \$35,000 (letter e above) = \$142,500 for annually thereafter.

Total cost for one level IV stroke center for medical equipment for the first 4 year period - \$4,800 (number 1 above) + \$402,785 (number 2 above) + \$571,500 (number 3 above) = \$979,085 for the first 4 year period.

Total cost for one level IV stroke center for medical equipment for annually thereafter - \$1,200 (number 1 above) + \$90,300 (number 2 above) + \$142,500 (number 3 above) = \$234,000 for annually thereafter.

- D. The stroke center shall have support services to assist the patient's family from time of entry into the facility to time of discharge - at least 1 full time equivalent medical social worker \$66,000 annually X 4 years X one level IV stroke center = \$264,000 for the first 4 year period and

**\$66,000 X one level IV stroke center X 1 year = \$66,000 annually thereafter.**

**E. Courses/conferences for stroke medical directors who are not board certified-**

- 1) National or international stroke course or conference - (\$1200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level IV stroke center - \$0 for the first 4 year period and \$2,950 X no level IV stroke center X 1 year = \$0 annually thereafter.**
- 2) Regional stroke course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level IV stroke center = \$1,750 X 1 course/conference (1 course/conference every 3 years) = \$1,750 for the first 4 year period and \$1,750 X one level IV stroke center X 1 course/conference (1 course/conference every 3 years) = \$1,750 annually thereafter.**
- 3) State stroke course or conference (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level IV stroke center X 4 years = \$0 for the first 4 year period and \$1,150 X no level IV stroke center X 1 year = \$0 annually thereafter.**

**F. Stroke registry -**

- a) Computer with internet capability/access \$600 computer + internet fee \$100/month \$1200 annually X 4 years X one level IV stroke center = \$7,200 for the first 4 year period and \$1,800 X one level IV stroke center X 1 year = \$1,800 annually thereafter.**
- b) Patient registrar - \$36,258 annually X 4 years X one level IV stroke center = \$145,032 for the first 4 year period and \$36,258 X one level IV stroke center X 1 year = \$36,258 annually thereafter.**
- c) Training to set up stroke registry system/program for data entry - \$200 annually X 4 years X one level IV stroke center = \$800 for the first 4 year period and \$200 X one level IV stroke center X 1 year = \$200 annually thereafter.**

**G. Public education program to promote stroke prevention and stroke symptoms awareness - e.g. community health fairs costs of printing and advertisement costs (posters, brochures etc...) \$350 for each health fair x 12 health fairs annually X 4 years = \$16,800 annually X one level IV stroke center = \$16,800 for the first 4 year period and \$4,200 annually X one level IV stroke center X 1 year = \$4,200 annually thereafter.**

**H. Patient education program to promote stroke prevention and stroke symptoms awareness - printing costs of brochures etc... \$500 annually X 4 years X one level IV stroke center = \$2,000 for the first 4 year period and \$500 X one level IV stroke center X 1 year = \$500 annually thereafter.**

- I. Stroke centers shall be actively involved in local and regional EMS systems by providing training and clinical educational resources - hospitals sponsor at least 1 conference per year within their area for EMS at the cost of \$2000 annually X 4 years X one level IV stroke center = \$8,000 for the first 4 year period and \$2,000 X one level IV stroke center X 1 year = \$2,000 annually thereafter.**
- J. A lighted designated helicopter landing area at the stroke center to accommodate incoming medical helicopters which shall be cordoned off at all times from the general public. The stroke center shall also have a landing area on the hospital premises no more than three (3) minutes from the emergency room - (construction of helipad estimate of \$36,000 X 1 helipad X one level IV stroke center X 1 year (the first year) = \$36,000) + (maintenance and upkeep of helipad \$2,000 X 3 years (years 2 through 4) X one level IV stroke center = \$6,000) for a total of \$42,000 for the first 4 year period for the helipad + (cordoning barrier \$4,300 X 1 year (the first year) X one level IV stroke center = \$4,300) + \$500 for maintenance and upkeep of the cordoning barrier X 3 years (years 2 through 4) X one level IV stroke center = \$1,500) for a total of \$5,800 for the first 4 year period for the cordoning barrier for a total of \$47,800 for the first 4 year period and \$2,000 for maintenance and upkeep of helipad + \$500 for maintenance and upkeep of the cordoning barrier = \$2,500 X 1 year X one level IV stroke center = \$2,500 annually thereafter.**

**Total cost for one level IV stroke center for the first 4 year period - \$7,154,032 (letter A above) + \$1,799.76 (letter B above) + \$979,085 (letter C above) + \$264,000 (letter D above) + \$1,750 (letter E above) + \$153,032 (letter F above) + \$16,800 (letter G above) + \$2,000 (letter H above) + \$8,000 (letter I above) + \$47,800 (letter J above) = \$8,628,298.70 for the first 4 year period.**

**Total cost for one level IV stroke center for annually thereafter- \$1,788,508 (letter A above) + \$449.94 (letter B above) + \$234,000 (letter C above) + \$66,000 (letter D above) + \$1,750 (letter E above) + \$38,258 (letter F above) + \$4,200 (letter G above) + \$500 (letter H above) + \$2,000 (letter I above) + \$2,500 (letter J above) = \$2,138,165.90 for annually thereafter.**

**It is expected that 4 level IV stroke centers will be designated during the first 4 year period (\$34,513,194.80) and those same 4 level IV stroke centers and 1 additional level IV stroke center will be designated again at some time (4 year intervals) annually thereafter (\$10,690,829.50).**

**Total cost for the first 4 year period - (\$113,240,552 Level I- number 1 above) + (\$104,904,142 Level II- number 2 above) + (\$102,149,400 Level III-number 3 above) + (\$34,513,194.80 Level IV-number 4 above) = \$354,852,688.80 for the first 4 year period. This number has been rounded up to \$354,807,289.**

**Total cost for annually thereafter - (\$26,910,344 Level I- number 1 above) + (\$24,052,214 Level II- number 2 above) + (\$30,851,370 Level III- number 3 above) + (\$10,690,830 Level IV-number 4 above) = \$92,504,758 for annually thereafter. The level III cost and the level IV cost has been rounded up.**

#### **IV. ASSUMPTIONS**

**The staffing and equipment requirements for designated stroke centers are based on recommendations from a task force comprised of physicians and other health care providers from hospitals and emergency medical services agencies throughout the state and national standards and guidelines for stroke centers.**

**Participation in Missouri's stroke center program is voluntary and no hospital shall be required to participate. However, if a hospital chooses to apply to be designated as a state stroke center and would like to hold itself out as a state designated stroke center, then it must apply for, be approved, comply with the applicable statutes and regulations and bear the costs detailed in this fiscal note. The costs in this fiscal note are for those hospitals which apply for and are approved to be a state designated stroke center. Also, it is important to note that those hospitals applying for the appropriate levels of stroke centers already have most of these items detailed in this fiscal note. This is explained throughout this assumption section below.**

**To obtain the potential numbers of stroke centers that might be applying in the future to be a state designated stroke center, the Department of Health and Senior Services used the number of state designated trauma centers as a guide. The Missouri trauma center program has been in effect since 1998. It should be noted that there are only 3 levels of trauma centers currently in Missouri (Level I, Level II and Level III).**

**There are approximately 148 private hospitals in Missouri.**

**Costs are estimated for a 4 year period because the designation for stroke centers will be for a period of 4 years.**

**Salaries are based on average salaries as reported by salary.com available on the Internet.**

**Staffing is based on minimum levels required by the rule. Some hospitals may choose to have additional staff as they deem appropriate to maintain levels of patient care.**

**Equipment costs are based on the minimum levels required by the rule. These equipment costs are based on the amount it would cost to purchase these items through medical equipment suppliers.**

**Costs are expected to increase at an average rate of inflation.**

The Department of Health and Senior Services estimated that there will be at least 2 designated level I private hospital stroke centers during the first 4 year period and these same level I stroke centers will be designated annually thereafter.

The Department of Health and Senior Services estimated that there will be at least 2 designated level II private hospital stroke centers during the first 4 year period and these same level II stroke centers will be designated annually thereafter.

The Department of Health and Senior Services estimated that there will be at least 4 designated level III private hospital stroke centers during the first 4 year period and these same 4 level III stroke centers plus 1 more level III stroke center for a total of 5 level III stroke centers will be designated annually thereafter.

The Department of Health and Senior Services estimated that there will be at least 4 designated level IV private hospital stroke centers during the first 4 year period and these same 4 level IV stroke centers plus 1 more level IV stroke center for a total of 5 level IV stroke centers will be designated annually thereafter.

Many of the hospitals requesting to be a state designated stroke center are going to have several of the required medical professionals already on staff so the costs of the medical professionals will probably not be a new cost to many hospitals. However, for hospitals without current stroke centers, the stroke medical director (required for levels I-IV), the stroke program manager (required for levels I-IV), staff required for the stroke unit (required for levels I -III), a neurointerventionalist (required for level I) and a nurse educator to ensure staff meet core competencies (required for levels I-II) might be new costs to these stroke centers. In addition, services for medical professionals (such as doctors) are billed out to the patient and the hospitals recover those costs or the hospital may not even pay the physician and the physician may directly bill the patient for the services rendered. Therefore many of these medical professional costs won't even be incurred by the stroke centers or will be recovered by the stroke centers.

Physicians are required to complete continuing medical education pursuant to the stroke regulations; however, this will most likely not be a new cost to physicians as physicians licensed in Missouri are required to complete fifty hours of continuing medical education every 2 years. Further, when figuring the costs of the continuing medical education and continuing education, the Department of Health and Senior Services used costs for online training. It should be noted that there are many free continuing education opportunities throughout the state of Missouri annually for both physicians and nurses. In addition, many physicians are independent from the hospitals and will incur these costs personally instead of the hospital incurring these costs.

Resuscitation equipment costs were detailed for each department for which resuscitation was required to be available. However, level I stroke centers will already have a neurointerventional laboratory, an emergency department, an intensive care unit, a radiology department, an operating room, and a post-anesthesia recovery room and many will already have a stroke unit. It is reasonable to believe that all of these departments currently existing in these hospitals already have resuscitation equipment so these costs will most likely not be new costs to level

**I stroke centers. Further, many of these costs in the resuscitation equipment (such as drugs necessary for emergency care) will be charged back to the stroke patient so the stroke center will most likely recover these costs.**

**For level II stroke centers, it is likely the hospital requesting to be a level II stroke center will already have an emergency department, an intensive care unit, a radiology department, an operating room and a post-anesthesia recovery room. Further these departments will already have the required resuscitation equipment. Many of these costs for resuscitation equipment will be charged to the stroke patient so the stroke centers will most likely be able to recover these costs.**

**For level III stroke centers, it is likely the hospital requesting to be a level III stroke center will already have an emergency department and a radiology department. Further, these departments will already have the required resuscitation equipment. Many of these costs for resuscitation equipment will be charged to the stroke patient, so the stroke centers will most likely be able to recover these costs.**

**For level IV stroke centers, it is likely the hospital requesting to be a level IV stroke center will already have an emergency department. Further this emergency department will already have the required resuscitation equipment. Many of these costs for resuscitation equipment will be charged to the stroke patients, so the stroke centers will most likely be able to recover these costs.**

**For level I, II and III stroke centers, it is very likely the hospitals requesting to be a level I, II or III stroke center will already have a Computerized Tomography (CT) scan so this will not be a new cost to these stroke centers.**

**For level I and II stroke centers, it is very likely the hospitals requesting to be a level I or level II stroke center will already have a magnetic resonance imaging (MRI) machine.**

**For level I and II stroke centers, it is very likely the hospitals requesting to be a level I or II stroke center will already have ultrasound/echo machines.**

**For level I and II stroke centers, it is very likely the hospitals requesting to be a level I or II stroke center will already have equipment to evaluate for a vasospasm.**

**For levels I, II, III and IV stroke centers, it is very likely the hospitals requesting to be said stroke centers will already have the equipment and ability to conduct laboratory analyses required for these stroke centers. Further, these analyses will be ultimately billed to the stroke patients so these costs will most likely be recovered by the hospitals.**

**For level I, II, III and IV stroke centers, it is likely that these hospitals already have a social worker providing support services in place, so this will not be a new cost for the stroke centers.**

**For level I, II and III stroke centers, it is likely that these hospitals already have a rehabilitation program in place, so this will not be a new cost for the stroke centers.**

**Further, the rehabilitation services will be billed to the patient so that hospital will most likely recover these costs.**

**For level I and II stroke centers, it is likely the hospitals already have the required operating room equipment, so this will not be a new cost to the stroke centers. Further, some of this equipment will be billed to the stroke patient, so the stroke center will most likely be able to recover this cost.**

**It is very likely members on the stroke call roster are already going to be carrying a cell phone and beeper. Thus it is likely these charges in levels I, II, III and IV stroke centers won't be a new cost to the stroke center.**



**Title 19—DEPARTMENT OF HEALTH AND  
SENIOR SERVICES  
Division 30—Division of Regulation and Licensure  
Chapter 40—Comprehensive Emergency Medical  
Services Systems Regulations**

**PROPOSED RULE**

**19 CSR 30-40.740 Definitions and Abbreviations Relating to ST-Segment Elevation Myocardial Infarction (STEMI) Centers**

*PURPOSE: This rule defines terminology related to STEMI centers.*

(1) For the purposes of 19 CSR 30-40.750 and 19 CSR 30-40.760 the following terms shall mean:

(A) Acute—an injury or illness that happens or appears quickly and can be serious or life-threatening;

(B) Anesthesiologist assistant (AA)—a person who—

1. Has graduated from an anesthesiologist assistant program accredited by the American Medical Association's Committee on Allied Health Education and Accreditation or by its successor agency;

2. Has passed the certifying examination administered by the National Commission on Certification of Anesthesiologist Assistants;

3. Has active certification by the National Commission on Certification of Anesthesiologist Assistants;

4. Is currently licensed as an anesthesiologist assistant in the state of Missouri; and

5. Provides health care services delegated by a licensed anesthesiologist;

(C) Board-admissible/board-eligible—a physician who has applied to a specialty board of the American Board of Medical Specialties, the Bureau of Osteopathic Specialties and Boards of Certification, or the Royal College of Physicians and Surgeons of Canada and has received a ruling that he or she has fulfilled the requirements to take the examinations. Board certification is generally obtained within five (5) years of the first appointment;

(D) Board-certified—a physician who has fulfilled all requirements, has satisfactorily completed the written and oral examinations, and has been awarded a board diploma in a specialty field by the American Board of Medical Specialties, the Bureau of Osteopathic Specialties and Boards of Certification, or the Royal College of Physicians and Surgeons of Canada;

(E) Cardiac catheterization laboratory—the setting within the hospital where percutaneous coronary interventions are done. Specialized staff, equipment, and protocol must be in place;

(F) Cardiac catheterization team—physicians and clinical staff who perform percutaneous coronary interventions and who are part of the clinical STEMI team;

(G) Cardiogenic shock—a life threatening condition in which the heart muscle does not pump enough blood to meet the body's needs;

(H) Cardiology Service—an organizational component of the hospital specializing in the care of patients who have had STEMIs or some other cardiovascular condition or disorder;

(I) Catchment area—the surrounding area served by the institution (the STEMI center);

(J) Certified registered nurse anesthetist (CRNA)—a registered nurse who has graduated from a school of nurse anesthesia accredited by the Council on Accreditation of Educational Programs of Nurse Anesthesia or its predecessor and who has been certified as a nurse anesthetist by the Council on Certification of Nurse Anesthetists;

(K) Clinical staff—an individual that has specific training and experience in the treatment and management of STEMI patients. Examples include physicians, registered nurses, advanced practice nurses, physician assistants, pharmacists, and technologists;

(L) Clinical team—a team of health care professionals involved in the care of the STEMI patient and may include, but not be limited

to, cardiologists, interventional cardiologists, cardiovascular surgeons, anesthesiologists, emergency medicine, and other STEMI center clinical staff. The clinical team is part of the hospital's STEMI team;

(M) Contiguous leads—the electrical cables that attach the electrodes on the patient to the electrocardiograph recorder and which are next to one another. They view the same general area of the heart;

(N) Continuing education—education approved or recognized by a national and/or state professional organization and/or STEMI medical director;

(O) Continuing medical education (CME)—the highest level of continuing education for physicians that is approved by a national and/or state professional organization and/or STEMI medical director;

(P) Core team—a subunit of the hospital STEMI team which consists of a physician experienced in diagnosing and treating STEMI (usually the STEMI medical director) and at least one (1) other health care professional or qualified individual competent in STEMI care as determined by the hospital (usually the STEMI program manager/coordinator);

(Q) Credentialed or credentialing—a hospital-specific system of documenting and recognizing the qualifications of medical staff and nurses and authorizing the performance of certain procedures and establishing clinical privileges in the hospital setting;

(R) Department—the Missouri Department of Health and Senior Services;

(S) Door-to-balloon-time—the time from arrival at the hospital door to percutaneous coronary intervention balloon inflation for the purpose of restoring blood flow in an obstructed coronary artery in the cardiac catheterization lab. This term is commonly abbreviated as D2B;

(T) Door-to-device-time—the time from patient arrival at the hospital to the time the device is in the affected cardiac blood vessel;

(U) Door-to-needle-time—the time from arrival at the hospital door to initiation of lytic therapy to restore blood flow in an obstructed blood vessel;

(V) Electrocardiogram (ECG/EKG)—a recorded tracing of the electrical activity of the heart. The heart rate, heartbeat regularity, size and chamber position, presence of any prior heart attack, current injury, and the effects of drugs or devices (i.e., pacemaker can be determined). An abnormal ECG pattern is seen during a heart attack because damaged areas of the heart muscle do not conduct electricity properly;

(W) Emergency medical service regions—the six (6) regions in the state of Missouri which are defined in 19 CSR 30-40.302;

(X) First medical contact—a patient's initial contact with a health care provider either pre-hospital, which could be contact with emergency medical service personnel or another medical provider, or in the hospital;

(Y) First medical contact to balloon or device time—the time from a patient's first medical contact with a health care provider to the time when the balloon is inflated or the device is in the affected cardiac blood vessel;

(Z) First medical contact to hospital door time—the time from a patient's first medical contact with a health care provider to the time when the patient arrives at the hospital door;

(AA) Hospital—an establishment as defined by section 197.020.2., RSMo, or a hospital operated by the state;

(BB) Immediately available (IA)—being present at bedside at the time of the patient's arrival at the hospital when prior notification is possible and no more than twenty (20) minutes from the hospital under normal driving and weather conditions;

(CC) In-house (IH)—being on the hospital premises twenty-four (24) hours a day;

(DD) Intermediate care unit—the functional division or facility of the hospital that provides care for STEMI patients admitted to the STEMI center;

(EE) Lytic therapy (fibrinolysis/thrombolysis)—drug therapy used to dissolve clots blocking flow in a blood vessel. It refers to drugs used for that purpose, including recombinant tissue plasminogen activator. This type of therapy can be used in the treatment of acute ischemic stroke and acute myocardial infarction;

(FF) Mentoring relationship—a relationship in which a high volume percutaneous coronary interventions operator, often described as performing one hundred fifty (150) or more procedures per year, serves as a mentor for an operator who performs less than eleven (11) primary percutaneous coronary interventions per year;

(GG) Missouri STEMI registry—a statewide data collection system comprised of key data elements as identified by the Department of Health and Senior Services used to compile and trend statistics of STEMI patients both pre-hospital and hospital, using a coordinated electronic reporting method provided by the Missouri Department of Health and Senior Services;

(HH) Multidisciplinary team—a team of appropriate representatives of hospital units involved in the care of the STEMI patient. This team supports the care of the STEMI patient with the STEMI team;

(II) Patient—an individual who is sick, injured, wounded, diseased, or otherwise incapacitated or helpless, or dead, excluding deceased individuals being transported from or between private or public institutions, homes, or cemeteries, and individuals declared dead prior to the time an ambulance is called for assistance;

(JJ) Peer review system—is the process the STEMI center establishes for physicians to review STEMI cases on patients that are admitted to the STEMI center, transferred out of the STEMI center, or die as a result of the STEMI (independent of hospital admission or hospital transfer status);

(KK) Percutaneous coronary intervention (PCI)—is a procedure used to open or widen narrowed or blocked blood vessels to restore blood flow supplying the heart. A primary percutaneous coronary intervention is one that is generally done on an emergency basis for a ST-elevation myocardial infarction (STEMI). Treatment occurs while the blood clot is still forming—usually within twenty-four (24) hours of onset, but ideally within two (2) hours of symptoms onset. An elective percutaneous coronary intervention is one that is done on a non-urgent basis to reduce signs and symptoms of angina;

(LL) Percutaneous coronary intervention window—the time frame in which percutaneous coronary intervention is most advantageous and recommended;

(MM) Phase I cardiac rehabilitation—an inpatient program that provides an individualized exercise and education plan for patients with cardiac illnesses;

(NN) Physician—a person licensed as a physician pursuant to Chapter 334, RSMo;

(OO) Promptly available (PA)—arrival at the hospital at the patient's bedside within thirty (30) minutes after notification of a patient's arrival at the hospital;

(PP) Protocol—a predetermined, written medical care guideline, which may include standing orders;

(QQ) Qualified individual—a physician, registered nurse, advanced practice registered nurse, and/or physician assistant that demonstrates administrative ability and shows evidence of educational preparation and clinical experience in the care of STEMI patients and is licensed by the state of Missouri;

(RR) Regional outcome data—data used to assess the regional process for pre-hospital, hospital, and regional patient outcomes;

(SS) Repatriation—the process used to return a STEMI patient to his or her home community from a level I or level II STEMI designated hospital after his or her acute treatment for STEMI has been completed. This allows the patient to be closer to home for continued hospitalization or rehabilitation and follow-up care as indicated by the patient's condition;

(TT) Reperfusion—the process of restoring normal blood flow to an organ or tissue that has had its blood supply cut off, such as after an ischemic stroke or myocardial infarction;

(UU) Requirement (R)—a symbol to indicate that a standard is a requirement for STEMI center designation at a particular level;

(VV) Review—is the inspection of a hospital to determine compliance with the rules of this chapter;

(WW) ST-elevation myocardial infarction (STEMI)—a myocardial infarction for which the electrocardiogram shows ST-segment elevation, usually in association with an acutely blocked coronary artery. A STEMI is one type of heart attack that is a potentially lethal condition for which specific therapies, administered rapidly, reduce mortality and disability. The more time that passes before blood flow is restored, the more damage that is done to the heart muscle;

(XX) STEMI call roster—a schedule that provides twenty-four (24) hours a day, seven (7) days a week cardiology service coverage. The call roster identifies the physicians or qualified individuals on the schedule that are available to manage and coordinate emergent, urgent, and routine assessment, diagnosis, and treatment of the STEMI patients;

(YY) STEMI care—education, prevention, emergency transport, triage, acute care, and rehabilitative services for STEMI that requires immediate medical or surgical intervention or treatment;

(ZZ) STEMI center—a hospital that is currently designated as such by the department to care for patients with ST-segment elevation myocardial infarctions.

1. A level I STEMI center is a receiving center staffed and equipped to provide total care for every aspect of STEMI care, including care for those patients with complications. It functions as a resource center for the hospitals within that region and conducts research.

2. A level II STEMI center is a receiving center staffed and equipped to provide care for a large number of STEMI patients within the region.

3. A level III STEMI center is primarily a referral center that provides prompt assessment, indicated resuscitation, and appropriate emergency intervention for STEMI patients to stabilize and arrange timely transfer to a Level I or II STEMI center, as needed.

4. A level IV STEMI center is a referral center in an area considered rural or where there are insufficient hospital resources to serve the patient population requiring STEMI care. The level IV STEMI center provides prompt assessment, indicated resuscitation, appropriate emergency intervention, and arranges and expedites transfer to a higher level STEMI center as needed;

(AAA) STEMI identification—a diagnosis is made on a basis of symptoms, clinical examination, and electrocardiogram changes, specifically ST-segment elevation;

(BBB) STEMI medical director—a physician designated by the hospital who is responsible for the STEMI service and performance improvement and patient safety programs related to STEMI care;

(CCC) STEMI program—an organizational component of the hospital specializing in the care of STEMI patients;

(DDD) STEMI program manager—a qualified individual designated by the hospital with responsibility for monitoring and evaluating the care of STEMI patients and the coordination of performance improvement and patient safety programs for the STEMI center in conjunction with the physician in charge of STEMI care;

(EEE) STEMI team—a component of the hospital STEMI program which consists of the core team and the clinical team;

(FFF) Symptom onset-to-treatment time—the time from symptom onset to initiation of therapy to restore blood flow in an obstructed blood vessel;

(GGG) Thrombolytics—drugs, including recombinant tissue plasminogen activator, used to dissolve clots blocking flow in a blood vessel. These thrombolytic drugs are used in the treatment of acute ischemic stroke and acute myocardial infarction; and

(HHH) Transfer agreement—a document which sets forth the rights and responsibilities of two (2) hospitals regarding the inter-hospital transfer of patients.

and 190.241, RSMo Supp. 2012. Original rule filed Nov. 15, 2012.

**PUBLIC COST:** This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

**PRIVATE COST:** This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate.

**NOTICE TO SUBMIT COMMENTS:** Anyone may file a statement in support of or in opposition to this proposed rule with Teresa Generous, Director, Department of Health and Senior Services, Division of Regulation and Licensure, PO Box 570, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the *Missouri Register*. No public hearing is scheduled.

**Title 19—DEPARTMENT OF HEALTH AND  
SENIOR SERVICES  
Division 30—Division of Regulation and Licensure  
Chapter 40—Comprehensive Emergency Medical  
Services Systems Regulations**

**PROPOSED RULE**

**19 CSR 30-40.750 ST-Segment Elevation Myocardial Infarction (STEMI) Center Designation Application and Review**

**PURPOSE:** This rule establishes the requirements for participation in Missouri's STEMI center program.

(1) Participation in Missouri's STEMI center program is voluntary and no hospital shall be required to participate. No hospital shall hold itself out to the public as a state-designated STEMI center unless it is designated as such by the Department of Health and Senior Services (department). Hospitals desiring STEMI center designation shall apply to the department. Only those hospitals found by review to be in compliance with the requirements of the rules of this chapter shall be designated by the department as STEMI centers.

(A) An application for STEMI center designation shall be made upon forms prepared or prescribed by the department and shall contain information the department deems necessary to make a fair determination of eligibility for review and designation in accordance with the rules of this chapter. The STEMI center review and designation application form, included herein, is available at the Health Standards and Licensure (HSL) office, or online at the department's website at [www.health.mo.gov](http://www.health.mo.gov), or may be obtained by mailing a written request to the Missouri Department of Health and Senior Services, HSL, PO Box 570, Jefferson City, MO 65102-0570. The application for STEMI center designation shall be submitted to the department no less than sixty (60) days and no more than one hundred twenty (120) days prior to the desired date of the initial designation or expiration of the current designation.

(B) Both sections A and B of the STEMI center review and designation application form, included herein, shall be complete before the department will arrange a date for the review. The department shall notify the hospital/STEMI center of any apparent omissions or errors in the completion of the STEMI center review and designation application form. When the STEMI center review and designation application form is complete, the department shall contact the hospital/STEMI center to arrange a date for the review.

(C) The hospital/STEMI center shall cooperate with the department in arranging for a mutually suitable date for any announced reviews.

(2) The different types of reviews to be conducted on hospitals/STEMI centers include:

(A) An initial review shall occur on a hospital applying to be initially designated as a STEMI center. An initial review shall include interviews with designated hospital staff, a review of the physical plant and equipment, and a review of records and documents as deemed necessary to assure compliance with the requirements of the rules of this chapter;

(B) A validation review shall occur on a designated STEMI center applying for renewal of its designation as a STEMI center. Validation reviews shall occur no less than every three (3) years. A validation review shall include interviews with designated STEMI center staff, a review of the physical plant and equipment, and a review of records and documents as deemed necessary to assure compliance with the requirements of the rules of this chapter; and

(C) A focus review shall occur on a designated STEMI center in which a validation review was conducted and substantial deficiency(ies) were cited. A review of the physical plant will not be necessary unless a deficiency(ies) was cited in the physical plant in the preceding validation review. The focus review team shall be comprised of a representative from the department and may include a qualified contractor(s) with the required expertise to evaluate corrections in areas where deficiencies were cited.

(3) STEMI center designation shall be valid for a period of three (3) years from the date the STEMI center/hospital is designated.

(A) STEMI center designation shall be site specific and non-transferable when a STEMI center changes location.

(B) Once designated as a STEMI center, a STEMI center may voluntarily surrender the designation at any time without giving cause, by contacting the department in writing. In these cases, the application and review process shall be completed again before the designation may be reinstated.

(4) For the purpose of reviewing previously designated STEMI centers and hospitals applying for STEMI center designation, the department shall use review teams consisting of qualified contractors. These review teams shall consist of one (1) STEMI coordinator or STEMI program manager who has experience in STEMI care and one (1) emergency medicine physician experienced in STEMI care. The review team shall also consist of at least (1) one and no more than two (2) cardiologist(s)/interventional cardiologist(s) who are experts in STEMI care. One (1) representative from the department will also be a participant of the review team. This representative shall coordinate the review with the hospital/STEMI center and the other review team members.

(A) Any individual interested in becoming a qualified contractor to conduct reviews shall—

1. Send the department a curriculum vitae (CV) or resume that includes his or her experience and expertise in STEMI care and whether an individual is in good standing with his or her licensing boards. A qualified contractor shall be in good standing with his or her respective licensing boards;

2. Provide the department evidence of his or her previous site survey experience (state and/or national designation survey process); and

3. Submit a list to the department that details any ownership he or she may have in a Missouri hospital(s), whether he or she has been terminated from any Missouri hospital(s), any lawsuits he or she has currently or had in the past with any Missouri hospital(s), and any Missouri hospital(s) for which his or her hospital privileges have been revoked.

(B) Qualified contractors for the department shall enter into a written agreement with the department indicating, that among other things, they agree to abide by Chapter 190, RSMo, and the rules in this chapter, during the review process.

(5) Out-of-state review team members shall conduct levels I and II hospital/STEMI center reviews. Review team members are considered out-of-state review team members if they work outside of the

state of Missouri. In-state review team members may conduct levels III and IV hospital/STEMI center reviews. Review team members are considered in-state review team members if they work in the state of Missouri. In the event that out-of-state reviewers are unavailable, levels I and II STEMI center reviews may be conducted by in-state reviewers from Emergency Medical Services (EMS) regions as set forth in 19 CSR 30-40.302 other than the region being reviewed with the approval of the director of the department or his/her designee. When utilizing in-state review teams, level I and II hospital/STEMI centers shall have the right to refuse one (1) in-state review team or certain members from one (1) in-state review team.

(6) Hospitals/STEMI centers shall be responsible for paying expenses related to the costs of the qualified contractors to review their respective hospital/STEMI center during initial, validation, and focus reviews. The department shall be responsible for paying the expenses of its representative. Costs of the review to be paid by the hospital/STEMI center include:

(A) An honorarium shall be paid to each qualified contractor of the review team. Qualified contractors of the review team for level I and II STEMI center reviews shall be paid six hundred dollars (\$600) for the day of travel per reviewer and eight hundred fifty dollars (\$850) for the day of the review per reviewer. Qualified contractors of the review team for level III and IV STEMI center reviews shall be paid five hundred dollars (\$500) for the day of travel per reviewer and five hundred dollars (\$500) for the day of the review per reviewer. This honorarium shall be paid to each qualified contractor of the review team at the time the site survey begins;

(B) Airfare shall be paid for each qualified contractor of the review team, if applicable;

(C) Lodging shall be paid for each qualified contractor of the review team. The hospital/STEMI center shall secure the appropriate number of hotel rooms for the qualified contractors and pay the hotel directly; and

(D) Incidental expenses, if applicable, for each qualified contractor of the review team shall not exceed two hundred fifty dollars (\$250) and may include the following:

1. Airport parking;
2. Checking bag charges;
3. Meals during the review; and
4. Mileage to and from the review if no airfare was charged by the reviewer.

Mileage shall be paid at the federal mileage rate for business miles as set by the Internal Revenue Service (IRS). Federal mileage rates can be found at the website [www.irs.gov](http://www.irs.gov).

(7) Upon completion of a review, the qualified contractors from the review team shall submit a report of their findings to the department. This report shall state whether the specific standards for STEMI center designation have or have not been met and if not met, in what way they were not met. This report shall detail the hospital/STEMI center's strengths, weaknesses, deficiencies, and recommendations for areas of improvement. This report shall also include findings from patient chart audits and a narrative summary of the following areas: prehospital, hospital, STEMI service, emergency department, operating room, angiography suites, recovery room, clinical lab, intensive care unit, rehabilitation, performance improvement and patient safety programs, education, outreach, research, chart review, and interviews. The department shall have the final authority to determine compliance with the rules of this chapter.

(8) The department shall return a copy of the report to the chief executive officer, the STEMI medical director, and the STEMI program manager/coordinator of the hospital/STEMI center reviewed. Included within the report shall be notification indicating whether the hospital/STEMI center has met the criteria for STEMI center designation or has failed to meet the criteria for STEMI center designation as requested. Also, if a focus review of the STEMI center is required, the time frame for this focus review will be shared with the

chief executive officer, the STEMI medical director, and the STEMI program manager/coordinator of the STEMI center reviewed.

(9) When the hospital/STEMI center is found to have deficiencies, the hospital/STEMI center shall submit a plan of correction to the department. The plan of correction shall include identified deficiencies, actions to be taken to correct deficiencies, time frame in which the deficiencies are expected to be resolved, and the person responsible for the actions to resolve the deficiencies. A plan of correction form shall be completed by the hospital and returned to the department within thirty (30) days after notification of review findings and designation. If a focus review is required, the STEMI center shall be allowed a minimum period of six (6) months to correct deficiencies.

(10) A STEMI center shall make the department aware in writing within thirty (30) days if there are any changes in the STEMI center's name, address, contact information, chief executive officer, STEMI medical director, or STEMI program manager/coordinator.

(11) Any person aggrieved by an action of the department affecting the STEMI center designation pursuant to Chapter 190, RSMo, including the revocation, the suspension, or the granting of, refusal to grant, or failure to renew a designation, may seek a determination by the Administrative Hearing Commission under Chapter 621, RSMo. It shall not be a condition to such determination that the person aggrieved seek reconsideration, a rehearing, or exhaust any other procedure within the department.

(12) The department may deny, place on probation, suspend, or revoke such designation in any case in which it has reasonable cause to believe that there has been a substantial failure to comply with the provisions of Chapter 190, RSMo, or any rules or regulations promulgated pursuant to this chapter. If the department has reasonable cause to believe that a hospital is not in compliance with such provisions or regulations, it may conduct additional announced or unannounced site reviews of the hospital to verify compliance. If a STEMI center fails two (2) consecutive on-site reviews because of substantial noncompliance with standards prescribed by sections 190.001 to 190.245, RSMo, or rules adopted by the department pursuant to sections 190.001 to 190.245, RSMo, its center designation shall be revoked.



MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES  
SECTION OF HEALTH SERVICES AND LICENSURE  
APPLICATION FOR STEMI CENTER REVIEW AND DESIGNATION

<b>SECTION A</b>			
In accordance with the requirements of the Chapter 190 RSMo and the applicable regulations, this application is hereby submitted for review and designation as a STEMI center. Please complete all information applicable to the requested designation level.			Designation Level Requested <input type="checkbox"/> I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV
<b>HOSPITAL INFORMATION</b>			
Name Of Hospital (Name To Appear On Designation Certificate)		Telephone Number	
Address (Street And Number)		City	Zip
<b>PROFESSIONAL INFORMATION</b>			
Chief Executive Officer		Chairman/President of Board of Trustees	
STEMI Medical Director		STEMI Program Manager	
Medical Director of Emergency Medicine		Medical Director of Intensive Care/Cardiac Care Unit	
<b>RESOURCE INFORMATION</b>			
STEMI Caseload	STEMI Team Activations	Cardiac Cath Lab Team Activations for STEMI	CT Capability <input type="checkbox"/> FULL <input type="checkbox"/> PARTIAL <input type="checkbox"/> NONE
MRI Capability <input type="checkbox"/> FULL <input type="checkbox"/> PARTIAL <input type="checkbox"/> NONE	Cardiothoracic Surgery Capability or Plan	ICU/CCU Beds	Cath Lab Suites
Cardiac Rehab <input type="checkbox"/> Phase I <input type="checkbox"/> Plan for Rehab	Cardiologists	Interventional Cardiologists	Cardiothoracic Surgeons
ED Physicians	Anesthesiologists/CRNAs & AAs	Avg Elective PCI/Primary PCIs over the last 3 years (not required for initial review)	Average STEMI cases lytics eligible/STEMI cases that receive lytics in the past 3 years (not required for initial review)
<b>CERTIFICATION</b>			
<p>We, the undersigned, hereby certify that the information provided in this application for STEMI center review and designation is true and accurate; and give assurance of the intent and ability of the hospital to comply with regulations promulgated under Chapter 190 RSMo.</p> <p>We further certify that the hospital will comply with all recommendations for improvement contained in the STEMI center site review reports prepared by the Missouri Department of Health and Senior Services.</p> <p>Date of application _____</p> <p>Signed _____ Chairman/President of Board of Trustees, Owner, or one Partner of Partnership</p> <p>Signed _____ Hospital Chief Executive Officer</p> <p>Signed _____ STEMI Medical Director</p> <p>Signed _____ Director of Emergency Medicine</p>			

MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES  
SECTION OF HEALTH STANDARDS AND LICENSURE  
APPLICATION FOR STEMI CENTER REVIEW AND DESIGNATION

**SECTION B**

Please attach the following documentation to the application form.

**Name of Hospital:**

- ☐ Hospital organizational chart depicting the relationship of the STEMI services to other services and defining the organizational structure of the STEMI service.
- ☐ Job descriptions and CV for the STEMI medical director and STEMI coordinator/program manager.
- ☐ A narrative description of the administrative commitment for the STEMI center, including how STEMI center designation relates to the overall mission of the hospital.
- ☐ A current board resolution supporting the STEMI center.
- ☐ A narrative description of the catchment area for the STEMI center.
- ☐ A narrative description of the prehospital system including the hospital's participation in medical control, quality assurance, and education of the emergency medicine personnel.
- ☐ Hospital diversion policy.
- ☐ List of the STEMI medical director and STEMI program coordinator or program manager (core STEMI team) indicating the cardiac related continuing education for each over the past three (3) years. (Do not send continuing education information about the clinical STEMI team. This should be available at the time of the review.)
- ☐ Multidisciplinary team policy.
- ☐ List of all cardiologists, cardiothoracic surgeons, interventional cardiologists and emergency department physicians indicating cardiac-related CME for each over the past three (3) years.
- ☐ List of mentors, if applicable, their relationship to the hospital and the mentor plan.
- ☐ Narrative description of the system for notifying/activating STEMI team
- ☐ Cardiac catheterization lab team activation protocol.
- ☐ One-call cardiac catheterization lab activation by EMS protocol and/or by ED protocol.
- ☐ Copies of all transfer agreements pertaining to STEMI.
- ☐ Policy for cardiac rehabilitation.
- ☐ Protocols on post-discharge and post-transfer follow-up for STEMI patients.
- ☐ A narrative description of the STEMI quality improvement (QI) processes utilized by the hospital (Do not send copies of QI minutes or documents. These should be available at the time of review.)
- ☐ Examples of STEMI-related educational, outreach, and research projects undertaken by the hospital.

*AUTHORITY: section 192.006, RSMo 2000, and sections 190.185 and 190.241, RSMo Supp. 2012. Original rule filed Nov. 15, 2012.*

*PUBLIC COST: This proposed rule will cost state agencies or political subdivisions four hundred eighty thousand nine hundred eighty dollars (\$480,980) for the initial five- (5-) year period and one hundred forty-eight thousand eighty dollars (\$148,080) annually thereafter.*

*PRIVATE COST: This proposed rule will cost private entities three hundred forty-three thousand one hundred forty dollars (\$343,140) for the initial five- (5-) year period and one hundred twenty-three thousand seven hundred sixty dollars (\$123,760) annually thereafter.*

*NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed rule with Teresa Generous, Director, Division of Regulation and Licensure, Missouri Department of Health and Senior Services, PO Box 570, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the **Missouri Register**. No public hearing is scheduled.*

FISCAL NOTE  
PUBLIC COST

- I. Department Title: Missouri Department of Health and Senior Services**  
**Division Title: Division of Regulation and Licensure**  
**Chapter Title: Chapter 40-Comprehensive Emergency Medical Services System**

<b>Rule Number and Name:</b>	<b>19 CSR 30-40.750 ST Segment Elevation Myocardial Infarction (STEMI) Center Designation Requirements.</b>
<b>Type of Rulemaking:</b>	<b>Proposed</b>

**II. SUMMARY OF FISCAL IMPACT**

Affected Agency or Political Subdivision	Estimated Cost of Compliance in the Aggregate
<b>18 public hospitals</b>	<b>\$186,480 for the initial five year period and \$89,180 annually thereafter.</b>
<b>Department of Health and Senior Services' costs</b>	<b>\$294,500 for the initial five year period and \$58,900 annually thereafter.</b>
<b>Total</b>	<b>\$480,980 for the initial five year period and \$148,080 annually thereafter.</b>

**III. WORKSHEET****1. Honorariums.**

- A. For level one and two designated STEMI centers during the initial five year period- \$600 for the day of travel per reviewer + \$850 for the day of the review per reviewer X four reviewers at the most= \$5,800.**  
**\$5,800 X three level one/two initial reviews= \$17,400.**  
**\$5,800 X three level one/two validation reviews= \$17,400.**  
**\$5,800 X two level one/two focus reviews= \$11,600.**

**\$17,400 + \$17,400 + \$11,600 = \$46,400 for the initial five year period for honorariums to be paid for reviews of level one/two designated STEMI centers.**

**For level one and two designated STEMI centers each year after the initial five year period-\$600 for the day of travel per reviewer + \$850 for the day of the review per reviewer X four reviewers at the most= \$5,800.**

**\$5,800 X one level one/two initial review= \$5,800.**  
**\$5,800 X two level one/two validation reviews=\$11,600.**  
**\$5,800 X two level one/two focus reviews=\$11,600.**



$\$5,800 + \$11,600 + \$11,600 = \$29,000$  for each year after the initial five year period for honorariums to be paid for reviews of level one/two designated STEMI centers.

- B. For level three and four designated STEMI centers during the initial five year period-  $\$500$  for the day of travel per reviewer +  $\$500$  for the day of review per reviewer X four reviewers at the most =  $\$4,000$ .

$\$4000$  X eight level three/four initial reviews=  $\$32,000$ .

$\$4000$  X eight level three/four validation review=  $\$32,000$ .

$\$4000$  X two level three/four focus review=  $\$8,000$ .

$\$32,000 + \$32,000 + \$8,000 = \$72,000$  for the initial five year period for honorariums to be paid for reviews of level three/four designated STEMI centers.

For level three and four designated STEMI centers during each year after the initial five year period-  $\$500$  for the day of travel per reviewer +  $\$500$  for the day of the review per reviewer X four reviewers at the most =  $\$4,000$ .

$\$4,000$  X one level three/four initial reviews=  $\$4,000$ .

$\$4,000$  X four level three/four validation reviews=  $\$16,000$ .

$\$4,000$  X two level three/four focus review=  $\$8,000$ .

$\$4,000 + \$16,000 + \$8,000 = \$28,000$  total honorariums for each year after the initial five year period for level three/four designated STEMI centers.

**Total Honorariums-**

$\$46,400$  (level one/two designated STEMI centers for the initial five year period) +  $\$72,000$  (level three/four designated STEMI centers for the initial five year period) =  $\$118,400$  total for level one/two/three/four designated STEMI centers for the initial five year period.

$\$29,000$  (level one/two designated STEMI centers for each year after the initial five year period) +  $\$28,000$  (level three/four designated STEMI centers for each year after the initial five year period) =  $\$57,000$  total for level one/two/three/four designated STEMI centers for each year after the initial five year period.

## **2. Airfare-**

For the initial five year period-  $\$400$  per reviewer X four reviewers at the most =  $\$1600$  X eight level one/two reviews during the initial five year period =  $\$12,800$ .

For each year after the initial five year period-  $\$400$  per reviewer X four reviewers at the most =  $\$1,600$  X five reviews each year after the initial five year period =  $\$8,000$ .

**3. Mileage-**

For the initial five year period- 500 miles per reviewer X \$0.51 X four reviewers at the most = \$1,020 X eighteen level three/four reviews during the initial five year period= \$18,360.

For each year after the initial five year period- 500 miles per reviewer X \$0.51 X four reviewers at the most = \$1,020 X seven level three/four reviews during each year after the initial five year period = \$7,140.

**4. Lodging-**

For the initial five year period - \$105 per reviewer X four reviewers at the most= \$420 X 26 reviews during the initial five year period= \$10,920.

For each year after the initial five year period - \$105 per reviewer X four reviewers at the most = \$420 X twelve reviews each year after the initial five year period = \$5,040.

**5. Incidental expenses for the initial five year period - \$250 per reviewer X four reviewers at the most= \$1,000 X 26 reviews during the initial five year period = \$26,000.**

For each year after the initial five year period - \$250 per reviewer X four reviewers at the most = \$1,000.00 X twelve reviews each year after the initial five year period = \$12,000.

**6. Department of Health and Senior Services' costs for staff liaison -**

For the first five year period -

Salary and benefits - \$80,000 X five years = \$400,000 divided by 2 because staff liaison also works with the stroke program for stroke designated centers = \$200,000

Indirect costs - \$20,000 X five years = \$100,000 divided by 2 because staff liaison also works with the stroke program for stroke designated centers = \$50,000

Network costs - \$2,200 X five years = \$11,000 divided by 2 because staff liaison also works with the stroke program for stroke designated centers = \$5,500

Mileage - 500 miles X .37 rate X twenty reviews/visits to hospitals average each year X five years = \$18,500

Lodging - \$105.00 X twenty reviews/visits to hospitals average each year X five years = \$10,500

Incidental expenses such as food - \$100 X twenty reviews/visits to hospitals average each year X five years = \$10,000

Total - \$294,500 for the first five year period.

For each year after the initial five year period -

Salary and benefits - \$80,000 X one year = \$80,000 divided by 2 because staff liaison also works with the stroke program for stroke designated centers = \$40,000

Indirect costs - \$20,000 X one year = \$20,000 divided by 2 because staff liaison also works with the stroke program for stroke designated centers = \$10,000

Network costs - \$2,200 X one year = \$2,200 divided by 2 because staff liaison also works with the stroke program for stroke designated centers = \$1,100

Mileage - 500 miles X .37 rate X twenty reviews/visits to hospitals average each year X one year = \$3,700

Lodging - \$105.00 X twenty reviews/visits to hospitals average each year X one year = \$2,100

Incidental expenses such as food - \$100 X twenty reviews/visits to hospitals average each year X one year = \$2,000

Total - \$58,900 for each year after the initial five year period.

**Total-**

For the initial five year period - \$118,400 (honorariums) + \$12,800 (airfare) + \$18,360 (mileage) + \$10,920 (lodging) + \$26,000 (incidental expenses) + \$294,500 (DHSS costs for staff liaison) = \$480,980 for the initial five year period.

For each year after the initial five year period - \$57,000 (honorariums) + \$8,000 (airfare) + \$7,140 (mileage) + \$5,040 (lodging) + \$12,000 (incidental expenses) + \$58,900 (DHSS costs for staff liaison) = \$148,080 annually thereafter.

**IV. ASSUMPTIONS**

There is one unlicensed public hospital in Missouri and 17 licensed public hospitals in Missouri. All of these public hospitals have the potential to apply for designation as a level one, two, three or four STEMI center. STEMI center designation is valid for a period of three years from the date the STEMI center/hospital is designated.

It is anticipated that there will be at least eleven public hospitals applying to become a designated STEMI center for at least the first five years as the interest expressed to the Department about hospitals becoming designated STEMI centers has been very positive. In fact, the interest expressed by the hospitals to become a STEMI designated center has been even greater than the interest expressed by the hospitals to become a stroke designated center. It is anticipated that three of the public hospitals applying to become a STEMI designated center during the first five year period will be requesting a level one or level two designation and eight public hospitals will be requesting to become a level three or level four designated STEMI center during the first five year period. Similarly, during the first five years, there will be at least eleven public hospitals requiring a validation review at the end of the three year designation period in order to become designated as a STEMI center again. It is anticipated that three of the public hospitals requesting a validation review will be a level one or level two designated STEMI center and eight public hospitals requiring a validation review will be level three or level four designated STEMI centers. Finally, there will be an average of four focus reviews during the first five years. Focus reviews for the trauma designated centers, a designation

process the Department has had in place for greater than ten years, have been required infrequently. However, since this STEMI center designation is a new designation then focus reviews for STEMI centers are anticipated to be greater than trauma designated centers. It is anticipated two of the focus reviews will be with a level one or level two designated STEMI center and two focus reviews will be conducted on a level three or level four designated STEMI center.

After the first five years, the Department anticipates one level one or level two public hospital will request an initial review each year after the initial five year period and one level three or level four public hospital will request an initial review each year after the initial five year period. The Department anticipates two level one or level two designated STEMI centers will require a validation review each year after the initial five year period and four level three or level four designated STEMI centers will require a validation review after the initial five year period. Finally, the Department anticipates two level one or level two designated STEMI centers will require a focus review each year after the initial five year period and two level three or level four designated STEMI centers will require a focus review each year after the initial five year period.

The review teams will have at the most four reviewers.

Reviewers of level one and level two trauma designated centers have been receiving approximately \$1450 for honorariums. Reviewers of level three trauma designated centers have been receiving approximately \$1000 for honorariums. The Department used these numbers for the reviewers of STEMI designated centers too.

Only reviewers for level one and level two STEMI designated centers will incur airfare charges because reviewers for level three and level four STEMI designated centers are in-state reviewers.

The airfare charge of \$400 per reviewer is an estimate found by looking at airfares on airline websites. This airfare charge is for a coach reservation on a roundtrip flight.

The mileage rate is figured for the reviewers by the federal business rate from the Internal Revenue Service which is currently \$0.51.

The estimate of 500 miles is an average to drive from the outermost points north to south or east to west in Missouri.

The mileage estimate is figured only with level three and level four designated STEMI center reviews as these will all be in-state reviewers.

The lodging costs of \$105.00 per reviewer is based on the current state reimbursement rate for St. Louis hotels.

The Department has placed a maximum of \$250.00 for the reimbursement of incidental expenses by reviewers.

Costs related to the Department's liaison are expected to increase with inflation.

**The mileage rate for the Department's liaison is \$.37 which is the current state rate of reimbursement.**

**Incidental expenses for the Department's liaison will mostly be for food/meal reimbursement.**

FISCAL NOTE  
PRIVATE COST

- I. Department Title: Missouri Department of Health and Senior Services**  
**Division Title: Division of Regulation and Licensure**  
**Chapter Title: Chapter 40-Comprehensive Emergency Medical Services System**

<b>Rule Number and Title:</b>	<b>19 CSR 30-40.750 ST Segment Elevation Myocardial Infarction (STEMI) Center Designation Requirements.</b>
<b>Type of Rulemaking:</b>	<b>Proposed</b>

**II. SUMMARY OF FISCAL IMPACT**

Estimate of the number of entities by class which would likely be affected by the adoption of the rule:	Classification by types of the business entities which would likely be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
<b>148</b>	<b>Private hospitals</b>	<b>\$343,140 for the initial five year period and \$123,760 annually thereafter.</b>

**III. WORKSHEET****1. Honorariums.**

- A. For level one and two designated STEMI centers during the initial five year period- \$600 for the day of travel per reviewer + \$850 for the day of the review per reviewer X four reviewers at the most = \$5,800.**  
**\$5,800 X seven level one/two initial reviews = \$40,600.**  
**\$5,800 X seven level one/two validation reviews = \$40,600.**  
**\$5,800 X three level one/two focus reviews = \$17,400.**

**\$40,600 + \$40,600 + \$17,400 = \$98,600 for the initial five year period for honorariums to be paid for reviews of level one/two designated STEMI centers.**

**For level one and two designated STEMI centers each year after the initial five year period-\$600 for the day of travel per reviewer + \$850 for the day of the review per reviewer X four reviewers at the most= \$5,800.**

$\$5,800 \times \text{one level one/two initial reviews} = \$5,800.$

$\$5,800 \times \text{three level one/two validation reviews} = \$17,400.$

$\$5,800 \times \text{two level one/two focus reviews} = \$11,600.$

$\$5,800 + \$17,400 + \$11,600 = \$34,800$  for each year after the initial five year period for honorariums to be paid for reviews of level one/two designated STEMI centers.

- B. For level three and four designated STEMI centers during the initial five year period- \$500 for the day of travel per reviewer + \$500 for the day of review per reviewer X four reviewers at the most = \$4,000.**

$\$4000 \times \text{twelve level three/four initial reviews} = \$48,000.$

$\$4000 \times \text{twelve level three/four validation reviews} = \$48,000.$

$\$4000 \times \text{six level three/four focus reviews} = \$24,000.$

$\$48,000 + \$48,000 + \$24,000 = \$120,000$  for the initial five year period for honorariums to be paid for reviews of level three/four designated STEMI centers.

For level three and four designated STEMI centers during each year after the initial five year period- \$500 for the day of travel per reviewer + \$500 for the day of the review per reviewer X four reviewers at the most = \$4,000.

$\$4,000 \times \text{two level three/four initial reviews} = \$8,000.$

$\$4,000 \times \text{six level three/four validation reviews} = \$24,000.$

$\$4,000 \times \text{three level three/four focus reviews} = \$12,000.$

$\$8,000 + \$24,000 + \$12,000 = \$44,000$  total honorariums for each year after the initial five year period for level three/four designated STEMI centers.

**Total Honorariums-**

$\$98,600$  (level one/two designated STEMI centers for the initial five year period) +  $\$120,000$  (level three/four designated STEMI centers for the initial five year period) =  $\$218,600$  total for level one/two/three/four designated STEMI centers for the initial five year period.

$\$34,800$  (level one/two designated STEMI centers for each year after the initial five year period) +  $\$44,000$  (level three/four designated STEMI centers for each year after the initial five year period) =  $\$78,800$  total for level one/two/three/four designated STEMI centers for each year after the initial five year period.

**2. Airfare-**

For the initial five year period- \$400 per reviewer X four reviewers at the most= \$1600 X 17 level one/two reviews during the initial five year period= \$27,200.

For each year after the initial five year period- \$400 per reviewer X four reviewers at the most = \$1,600 X 6 reviews each year after the initial five year period = \$9,600.

**3. Mileage-**

For the initial five year period- 500 miles per reviewer X \$0.51 X four reviewers at the most= \$1,020 X 30 level three/four reviews during the initial five year period= \$30,600.

For each year after the initial five year period- 500 miles per reviewer X \$0.51 X four reviewers at the most= \$1,020 X 11 level three/four reviews during each year after the initial five year period=\$11,220.

**4. Lodging-**

For the initial five year period- \$105 per reviewer X four reviewers at the most= \$420 X 47 reviews during the initial five year period= \$19,740.

For each year after the initial five year period- \$105 per reviewer X four reviewers at the most = \$420 X 17 reviews each year after the initial five year period=\$7,140.

**5. Incidental expenses for the initial five year period- \$250 per reviewer X four reviewers at the most = \$1,000 X 47 reviews during the initial five year period=\$47,000.**

For each year after the initial five year period- \$250 per reviewer X four reviewers at the most = \$1,000.00 X 17 reviews each year after the initial five year period= \$17,000.

**Total-**

For the initial five year period- \$218,600 (honorariums) + \$27,200 (airfare) + \$30,600 (mileage) + \$19,740 (lodging) + \$47,000 (incidental expenses) = \$343,140.

For each year after the five year period- \$78,800 (honorariums) + \$9,600 (airfare) + \$11,220 (mileage) + \$7,140 (lodging) + \$17,000 (incidental expenses) = \$123,760.



#### **IV. ASSUMPTIONS**

**There are 148 private licensed hospitals in Missouri. All of these private hospitals have the potential to apply for designation as a level one, two, three or four STEMI center. STEMI center designation is valid for a period of three years from the date the STEMI center/hospital is designated.**

**It is anticipated that there will be at least 19 private hospitals on average applying to become a designated STEMI center (level one, level two, level three or level four) during the first five year period as the interest expressed to the Department about hospitals becoming designated STEMI centers has been very positive. In fact, the interest expressed by the hospitals to become a STEMI designated center has been even greater than the interest expressed by the hospitals to become a stroke designated center. It is anticipated that seven of the private hospitals applying to become a STEMI designated center each year will be requesting a level one or level two designation and twelve private hospitals will be requesting to become a level three or level four designated STEMI center during this five year period. Similarly, during the first five years, there will be at least 19 private hospitals requiring a validation review at the end of the three year designation period in order to become designated as a STEMI center again. It is anticipated that seven of the private hospitals requesting a validation review will be a level one or level two designated STEMI center and twelve private hospitals requiring a validation review will be a level three or level four designated STEMI center. Finally, there will be an average of nine focus reviews during the first five years. Focus reviews for the trauma designated centers, a designation process the Department has had in place for greater than ten years, have been required infrequently. However, since this STEMI center designation is a new designation then focus reviews for STEMI centers are anticipated to be greater than trauma designated centers. It is anticipated three of the focus reviews will be with a level one or level two designated STEMI center during the first five year period and six focus reviews will be conducted on a level three or level four designated STEMI center during the first five year period.**

**After the first five years, the Department anticipates one level one or level two private hospitals will request an initial review each year after the initial five year period and two level three or level four private hospitals will request an initial review each year after the initial five year period. The Department anticipates three level one or level two designated STEMI centers will require a validation review each year after the initial five year period and six level three or level four designated STEMI centers will require a validation review after the initial five year period. Finally, the Department anticipates two level one or level two designated STEMI centers will require a focus review each year after the initial five year period and three level three or level four designated STEMI centers will require a focus review each year after the initial five year period.**

**The review teams will have at the most four reviewers.**

Reviewers of level one and level two trauma designated centers have been receiving approximately \$1450 for honorariums. Reviewers of level three trauma designated centers have been receiving approximately \$1000 for honorariums. The Department used these numbers for the reviewers of STEMI designated centers too.

Only reviewers for level one and level two STEMI designated centers will incur airfare charges because reviewers for level three and level four STEMI designated centers are in-state reviewers.

The airfare charge of \$400 per reviewer is an estimate found by looking at airfares on airline websites. This airfare charge is for a coach reservation on a roundtrip flight.

The mileage rate is figured by the federal business rate from the Internal Revenue Service which is currently \$0.51.

The estimate of 500 miles is an average to drive from the outermost points north to south or east to west in Missouri.

The mileage estimate is figured only with level three and level four designated STEMI center reviews as these will all be in-state reviewers.

The lodging costs of \$105.00 per reviewer is based on the current state reimbursement rate for St. Louis hotels.

The Department has placed a maximum of \$250.00 for the reimbursement of incidental expenses by reviewers.

**ROBIN CARNAHAN**  
SECRETARY OF STATE  
PO Box 1767  
JEFFERSON CITY, MO 65102

Periodical  
Postage Paid at  
Jefferson City,  
MO

**THIS ISSUE CONTAINS  
THREE PARTS**

**END OF PART I**

Volume 37, Number 24  
Pages 2093-2294  
December 17, 2012  
Part II

SALUS POPULI SUPREMA LEX ESTO

*"The welfare of the people shall be the supreme law."*



ROBIN CARNAHAN  
SECRETARY OF STATE

# MISSOURI REGISTER

The *Missouri Register* is an official publication of the state of Missouri, under the authority granted to the secretary of state by sections 536.015, RSMo Supp. 2012 and 536.033, RSMo 2000. Reproduction of rules is allowed; however, no reproduction shall bear the name *Missouri Register* or "official" without the express permission of the secretary of state.

The *Missouri Register* is published semi-monthly by

**SECRETARY OF STATE**

**ROBIN CARNAHAN**

Administrative Rules Division

James C. Kirkpatrick State Information Center  
600 W. Main  
Jefferson City, MO 65101  
(573) 751-4015

**DIRECTOR**

WAYLENE W. HILES

•

**EDITORS**

CURTIS W. TREAT

SALLY L. REID

**ASSOCIATE EDITOR**

DELANE JACQUIN

•

**PUBLICATION TECHNICIAN**

JACQUELINE D. WHITE

•

**SPECIALIST**

MICHAEL C. RISBERG

•

**ADMINISTRATIVE ASSISTANT**

ALISHA DUDENHOEFFER

ISSN 0149-2942, USPS 320-630; periodical postage paid at Jefferson City, MO  
Subscription fee: \$56.00 per year

POSTMASTER: Send change of address notices and undelivered copies to:

**MISSOURI REGISTER**

Office of the Secretary of State

Administrative Rules Division

PO Box 1767

Jefferson City, MO 65102

The *Missouri Register* and *Code of State Regulations* (CSR) are now available on the Internet. The Register address is <http://www.sos.mo.gov/adrules/moreg/moreg.asp> and the CSR is <http://www.sos.mo.gov/adrules/csr/csr.asp>. These websites contain rulemakings and regulations as they appear in the Registers and CSR. These websites do not contain the official copies of the Registers and CSR. The official copies remain the paper copies published by the Office of the Secretary of State pursuant to sections 536.015 and 536.031, RSMo Supp. 2012. While every attempt has been made to ensure accuracy and reliability, the Registers and CSR are presented, to the greatest extent practicable as they appear in the official publications. The Administrative Rules Division may be contacted by email at [rules@sos.mo.gov](mailto:rules@sos.mo.gov).

The secretary of state's office makes every effort to provide program accessibility to all citizens without regard to disability. If you desire this publication in alternate form because of a disability, please contact the Division of Administrative Rules, PO Box 1767, Jefferson City, MO 65102, (573) 751-4015. Hearing impaired citizens should contact the director through Missouri relay, (800) 735-2966.



## IN THIS ISSUE:

### PART I

#### PROPOSED RULES

##### Department of Health and Senior Services

Division of Regulation and Licensure . . . . .1889

### PART II

##### Department of Health and Senior Services

Division of Regulation and Licensure . . . . .2097

##### Department of Insurance, Financial Institutions and Professional Registration

State Board of Pharmacy . . . . .2286

### PART III

##### Department of Insurance, Financial Institutions and Professional Registration

Real Estate Appraisers . . . . .2299

### ORDERS OF RULEMAKING

##### Department of Agriculture

State Milk Board . . . . .2320

Weights and Measures . . . . .2322

##### Department of Social Services

MO HealthNet Division . . . . .2324

##### Department of Insurance, Financial Institutions and Professional Registration

Missouri State Board of Accountancy . . . . .2325

Missouri Board for Architects, Professional Engineers,

Professional Land Surveyors, and Landscape Architects . .2325

Division of Professional Registration . . . . .2326

Missouri Real Estate Commission . . . . .2326

**CONTRACTOR DEBARMENT LIST** . . . . .2328

**DISSOLUTIONS** . . . . .2330

### SOURCE GUIDES

**RULE CHANGES SINCE UPDATE** . . . . .2332

**EMERGENCY RULES IN EFFECT** . . . . .2337

**EXECUTIVE ORDERS** . . . . .2339

**REGISTER INDEX** . . . . .2341

Register Filing Deadlines	Register Publication Date	Code Publication Date	Code Effective Date
August 1, 2012	September 4, 2012	September 30, 2012	October 30, 2012
August 15, 2012	September 17, 2012	September 30, 2012	October 30, 2012
September 4, 2012	October 1, 2012	October 31, 2012	November 30, 2012
September 17, 2012	October 15, 2012	October 31, 2012	November 30, 2012
October 1, 2012	November 1, 2012	November 30, 2012	December 30, 2012
October 15, 2012	November 15, 2012	November 30, 2012	December 30, 2012
November 1, 2012	December 3, 2012	December 31, 2012	January 30, 2013
November 15, 2012	December 17, 2012	December 31, 2012	January 30, 2013
December 3, 2012	January 2, 2013	January 29, 2013	February 28, 2013
December 17, 2012	January 15, 2013	January 29, 2013	February 28, 2013
January 2, 2013	February 1, 2013	February 28, 2013	March 30, 2013
January 15, 2013	February 15, 2013	February 28, 2013	March 30, 2013
February 1, 2013	March 1, 2013	March 31, 2013	April 30, 2013
February 15, 2013	March 15, 2013	March 31, 2013	April 30, 2013
March 1, 2013	April 1, 2013	April 30, 2013	May 30, 2013
March 15, 2013	April 15, 2013	April 30, 2013	May 30, 2013
April 1, 2013	May 1, 2013	May 31, 2013	June 30, 2013
April 15, 2013	May 15, 2013	May 31, 2013	June 30, 2013
May 1, 2013	June 3, 2013	June 30, 2013	July 30, 2013
May 15, 2013	June 17, 2013	June 30, 2013	July 30, 2013

Documents will be accepted for filing on all regular workdays from 8:00 a.m. until 5:00 p.m. We encourage early filings to facilitate the timely publication of the *Missouri Register*. Orders of Rulemaking appearing in the *Missouri Register* will be published in the *Code of State Regulations* and become effective as listed in the chart above. Advance notice of large volume filings will facilitate their timely publication. We reserve the right to change the schedule due to special circumstances. Please check the latest publication to verify that no changes have been made in this schedule. To review the entire year's schedule, please check out the website at <http://www.sos.mo.gov/adrules/pubsched.asp>

# Missouri Participating Libraries

The *Missouri Register* and the *Code of State Regulations*, as required by the Missouri Documents Law (section 181.100, RSMo Supp. 2012), are available in the listed participating libraries, as selected by the Missouri State Library:

Jefferson County Library PO Box 1486, 3021 High Ridge High Ridge, MO 63049-1486 (314) 677-8689	Learning Resources Center Mineral Area College PO Box 1000 Park Hills, MO 63601-1000 (573) 431-4593	Hearnes Learning Resources Ctr. Missouri Western State University 4525 Downs Drive St. Joseph, MO 64507-2294 (816) 271-5802	Library Missouri University of Science and Technology 1870 Miner Circle Rolla, MO 65409-0060 (573) 341-4007
Jefferson College Library 1000 Viking Drive Hillsboro, MO 63050-2441 (314) 789-3951 ext. 160	Cape Girardeau Public Library 711 N. Clark Cape Girardeau, MO 63701-4400 (573) 334-5279	Library North Central Missouri College PO Box 111, 1301 Main Street Trenton, MO 64683-0107 (660) 359-3948 ext. 325	Lebanon-Laclede County Library 915 S. Jefferson Ave. Lebanon, MO 65536-3017 (417) 532-2148
St. Louis Public Library 1301 Olive St. St. Louis, MO 63103-2389 (314) 539-0376	Kent Library Southeast Missouri State University One University Plaza Cape Girardeau, MO 63701-4799 (573) 651-2757	Spiva Library Missouri Southern State University 3950 East Newman Road Joplin, MO 64801-1595 (417) 625-9342	University Library Southwest Baptist University 1600 University Ave. Bolivar, MO 65613-2597 (417) 328-1631
St. Louis University Law Library 3700 Lindell Blvd. St. Louis, MO 63108-3478 (314) 977-2742	Riverside Regional Library PO Box 389, 1997 E. Jackson Blvd. Jackson, MO 63755-0389 (573) 243-8141	Missouri State Library 600 West Main, PO Box 387 Jefferson City, MO 65102-0387 (573) 751-3615	Barry-Lawrence Regional Library 213 6th St. Monett, MO 65708-2147 (417) 235-6646
Eden/Webster Library Eden Theological Seminary/ Webster University 475 East Lockwood Ave. St. Louis, MO 63119-3192 (314) 961-2660 ext. 7812	Rutland Library Three Rivers Community College 2080 Three Rivers Blvd. Poplar Bluff, MO 63901-2393 (573) 840-9656	Missouri State Archives 600 West Main, PO Box 778 Jefferson City, MO 65102-0778 (573) 526-6711	Lyons Memorial Library College of the Ozarks General Delivery Point Lookout, MO 65726-9999 (417) 334-6411 ext. 3551
Thomas Jefferson Library University of Missouri-St. Louis 8001 Natural Bridge Road St. Louis, MO 63121-4499 (314) 516-5084	James C. Kirkpatrick Library University of Central Missouri 142 Edwards Library Warrensburg, MO 64093-5020 (660) 543-4149	Elmer Ellis Library University of Missouri-Columbia 106 B Ellis Library Columbia, MO 65211-5149 (573) 882-0748	Garnett Library Missouri State University—West Plains 304 Cleveland West Plains, MO 65775-3414 (417) 255-7945
Washington University Law Library Washington University Campus Box 1171, Mudd Bldg., One Brookings Dr. St. Louis, MO 63130-4899 (314) 935-6443	Kansas City Public Library 14 West 10th Street Kansas City, MO 64105 (816) 701-3546	Library State Historical Society of Missouri 1020 Lowry St. Columbia, MO 65211-7298 (573) 882-9369	Springfield-Greene County Library 4653 S. Campbell Springfield, MO 65801-0760 (417) 874-8110
St. Louis County Library 1640 S. Lindbergh Blvd. St. Louis, MO 63131-3598 (314) 994-3300 ext. 247	Law Library University of Missouri-Kansas City 5100 Rockhill Road Kansas City, MO 64110-2499 (816) 235-2438	Daniel Boone Regional Library PO Box 1267, 100 West Broadway Columbia, MO 65205-1267 (573) 443-3161 ext. 359	Meyer Library Missouri State University PO Box 175, 901 S. National Springfield, MO 65804-0095 (417) 836-4533
Library Maryville University 13550 Conway Road St. Louis, MO 63141-7232 (314) 529-9494	Miller Nichols Library University of Missouri-Kansas City 5100 Rockhill Road Kansas City, MO 64110-2499 (816) 235-2438	School of Law University of Missouri-Columbia 224 Hulston Hall Columbia, MO 65211-0001 (573) 882-1125	
Pickler Memorial Library Truman State University 100 E. Normal Kirksville, MO 63501-4221 (660) 785-7416	B.D. Owens Library Northwest Missouri State University 800 University Drive Maryville, MO 64468-6001 (660) 562-1841	Smiley Memorial Library Central Methodist University 411 Central Methodist Square Fayette, MO 65248-1198 (660) 248-6279	
	St. Joseph Public Library 927 Felix Street St. Joseph, MO 64501-2799 (816) 232-8151		

## HOW TO CITE RULES AND RSMo

**RULES**—Cite material in the *Missouri Register* by volume and page number, for example, Vol. 28, *Missouri Register*, page 27. The approved short form of citation is 28 MoReg 27.

The rules are codified in the *Code of State Regulations* in this system—

Title	Code of State Regulations	Division	Chapter	Rule
1	CSR	10-	1.	010
Department		Agency, Division	General area regulated	Specific area regulated

They are properly cited by using the full citation , i.e., 1 CSR 10-1.010.

Each department of state government is assigned a title. Each agency or division within the department is assigned a division number. The agency then groups its rules into general subject matter areas called chapters and specific areas called rules. Within a rule, the first breakdown is called a section and is designated as (1). Subsection is (A) with further breakdown into paragraph 1., subparagraph A., part (I), subpart (a), item I. and subitem a.

**RSMo**—The most recent version of the statute containing the section number and the date.

**Title 19—DEPARTMENT OF HEALTH AND  
SENIOR SERVICES  
Division 30—Division of Regulation and Licensure  
Chapter 40—Comprehensive Emergency Medical  
Services Systems Regulations**

**PROPOSED RULE**

**19 CSR 30-40.760 Standards for ST-Segment Elevation  
Myocardial Infarction (STEMI) Center Designation**

*PURPOSE: This rule establishes standards for level I, II, III, and IV STEMI center designation.*

*AGENCY NOTE:*

*I-R, II-R, III-R, or IV-R after a standard indicates a requirement for level I, II, III, or IV STEMI centers respectively.*

*I-IH, II-IH, III-IH, or IV-IH after a standard indicates an in-house requirement for level I, II, III, or IV STEMI centers respectively.*

*I-IA, II-IA, III-IA, or IV-IA indicates an immediately available requirement for level I, II, III, or IV STEMI centers respectively.*

*I-PA, II-PA, III-PA, or IV-PA indicates a promptly available requirement for level I, II, III, or IV STEMI centers respectively.*

*PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome and expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.*

**(1) General Standards for STEMI Center Designation.**

(A) The STEMI center board of directors, administration, medical staff, and nursing staff shall demonstrate a commitment to quality STEMI care. Methods of demonstrating the commitment shall include, but not be limited to, a board resolution that the hospital governing body agrees to establish policy and procedures for the maintenance of services essential for a STEMI center; assure that all STEMI patients will receive medical care at the level of the hospital's designation; commit the institution's financial, human, and physical resources as needed for the STEMI program; and establish a priority admission for the STEMI patient to the full services of the institution. (I-R, II-R, III-R, IV-R)

(B) STEMI centers shall agree to accept all STEMI patients appropriate for the level of care provided at the hospital, regardless of race, sex, creed, or ability to pay. (I-R, II-R, III-R, IV-R)

(C) The STEMI center shall demonstrate evidence of a STEMI program. The STEMI program shall be available twenty-four (24) hours a day, seven (7) days a week to treat and evaluate STEMI patients. (I-R, II-R, III-R, IV-R)

1. The STEMI center shall maintain a STEMI team that at a minimum consists of—

A. A core team which provides administrative oversight and includes the following:

(I) A physician experienced in diagnosing and treating cardiovascular disease and STEMI (usually the STEMI medical director); and (I-R, II-R, III-R, IV-R)

(II) At least one (1) other health care professional or qualified individual credentialed in STEMI care (usually the STEMI program manager/coordinator); (I-R, II-R, III-R, IV-R)

B. A STEMI call roster that provides twenty-four (24) hours a day, seven (7) days a week cardiology service coverage. The call roster identifies the physicians or qualified individuals on the schedule that are available to manage and coordinate emergent, urgent, and routine assessment, diagnosis, and treatment of the STEMI patients. A level I and level II STEMI call roster shall include, but not be limited to, the emergency department physician, interventional cardiologist, and others as appropriate. The level III STEMI center call roster shall include, but not be limited to, the emergency department physician and others as appropriate. A level IV STEMI center call roster shall include, but not be limited to, the emergency department physician and other qualified individuals as appropriate. (I-R, II-R, III-R, IV-R)

ited to, the emergency department physician, interventional cardiologist, and others as appropriate. The level III STEMI center call roster shall include, but not be limited to, the emergency department physician and others as appropriate. A level IV STEMI center call roster shall include, but not be limited to, the emergency department physician and other qualified individuals as appropriate. (I-R, II-R, III-R, IV-R)

(I) Level I and II STEMI centers shall have this coverage promptly available from notification of STEMI patients. (I-R, II-R)

(II) Level III and IV STEMI centers shall have a regional networking agreement with a level I or level II STEMI center for telephone consult or telemedicine consultation promptly available from notification of STEMI patients; and (I-R, II-R, III-R, IV-R)

C. A clinical team appropriate to the center level designation that may include, but not be limited to, cardiologists, interventional cardiologists, clinical perfusionists, members of the STEMI call roster, members of the cardiac catheterization team, cardiothoracic surgeons, anesthesiologists, emergency department physicians, intensivists, and other STEMI center clinical staff as applicable. (I-R, II-R, III-R, IV-R)

2. The STEMI center shall have a peer review system to review STEMI cases respective of the STEMI center's designation. (I-R, II-R, III-R, IV-R)

3. The STEMI team shall have appropriate experience to maintain skill and proficiency to care for STEMI patients. The STEMI center shall maintain evidence that it meets the following requirements by documenting the following:

A. A list of all STEMI team members; (I-R, II-R, III-R, IV-R)

B. Position qualifications and completion of continuing education requirements by STEMI team members as set forth in sections (1), (2), and (4) of this rule; (I-R, II-R, III-R, IV-R)

C. Management of sufficient numbers of STEMI patients by the STEMI team members in order to maintain their STEMI skills; (I-R, II-R, III-R, IV-R)

D. Participation by the core team and members of the STEMI call roster in at least half of the regular, ongoing STEMI program peer review system meetings as shown in meeting attendance documents. The STEMI medical director shall disseminate the information and findings from the peer review system meetings to the STEMI call roster members and the core team and document such dissemination; (I-R, II-R, III-R, IV-R)

E. Participation by STEMI team members in at least half of the regular ongoing STEMI program performance improvement and patient safety meetings and documentation of such attendance in the meeting minutes and/or meeting attendance documents. The STEMI medical director shall disseminate the information and findings from the performance improvement and patient safety meetings to the STEMI team members and document such dissemination. If a STEMI team member is unable to attend a STEMI program performance improvement and patient safety meeting, then the STEMI team member shall send an appropriate representative in his/her place; (I-R, II-R, III-R, IV-R)

F. Maintenance of skill levels in the management of STEMI patients by the STEMI team members as required by the STEMI center and the STEMI medical director and documentation of such continued experience; and (I-R, II-R, III-R, IV-R)

G. Review of regional outcome data on the quality of patient care by STEMI team members as part of the STEMI center's performance improvement and patient safety process. (I-R, II-R, III-R, IV-R)

4. The STEMI center shall maintain a multidisciplinary team, in addition to the STEMI team, to support the care of STEMI patients. (I-R, II-R, III-R, IV-R)

A. The multidisciplinary team shall include a suitable representative from hospital units as appropriate for care of each STEMI patient. The units represented on the multidisciplinary team may include, but not be limited to: administration, emergency medical



services, intensive care unit, cardiac catheterization lab, pharmacy, laboratory, intermediate care unit, cardiac rehabilitation, and discharge planning. (I-R, II-R, III-R, IV-R)

B. The multidisciplinary team members or their representatives shall attend at least half of the STEMI program performance improvement and patient safety meetings which shall be documented in meeting minutes and/or meeting attendance documents. (I-R, II-R, III-R, IV-R)

(D) The STEMI center shall provide the services of a cardiac catheterization laboratory staffed twenty-four (24) hours a day, seven (7) days a week. The staff of the cardiac catheterization laboratory, referred to as the cardiac catheterization laboratory team, shall consist of at least the following:

1. An interventional cardiologist. The STEMI center credentialing committee shall document that the interventional cardiologist has completed appropriate training and conducted sufficient coronary interventional procedures. In addition, the interventional cardiologist shall annually conduct a sufficient number of percutaneous coronary interventions (PCIs). It is recommended that interventional cardiologist(s) perform seventy-five (75) or more elective percutaneous coronary interventions per interventional cardiologist per year and eleven (11) or more primary percutaneous coronary interventions per interventional cardiologist per year; and (I-R/PA, II-R/PA)

2. Other health care professional as deemed necessary. (I-R/PA, II-R/PA)

(E) A level I STEMI center shall meet the following criteria:

1. It is recommended that the cardiac catheterization laboratory perform—

- A. At least an average of four hundred (400) or more elective percutaneous coronary interventions per year over three (3) consecutive preceding years per STEMI center; and

- B. At least an average of forty-nine (49) or more primary percutaneous coronary interventions per year over three (3) consecutive preceding years per STEMI center; and

2. On-site emergency cardiothoracic surgical services as needed twenty-four (24) hours a day, seven (7) days a week. (I-R/PA)

(F) A level II STEMI center shall meet one (1) of the two (2) options outlined below to qualify for a level II STEMI center designation—

1. Option one—

- A. It is recommended that the cardiac catheterization laboratory perform—

- (I) An average of two hundred (200) or more elective percutaneous coronary interventions per year over three (3) consecutive preceding years per STEMI center; and

- (II) An average of thirty-six (36) or more primary percutaneous coronary interventions per year over three (3) consecutive preceding years per STEMI center; and

- B. On-site emergency cardiothoracic surgical services or have a written plan that has been shown to be effective, a transfer agreement, and expedited transfer process for cardiothoracic surgery back-up in a nearby STEMI center with appropriate hemodynamic support capability for transfer. The written plan shall ensure that once a potential need for cardiothoracic intervention is identified, the STEMI patient can be evaluated by cardiothoracic surgery and in the operating room (OR) of the receiving hospital as expeditiously as possible; or (II-R)

2. Option two is a level II STEMI center that performs less than a recommended average of two hundred (200) elective percutaneous coronary interventions per year and a recommended average of thirty-six (36) or more primary percutaneous coronary interventions per year over three (3) consecutive preceding years or a recommended average of two hundred (200) elective percutaneous coronary interventions per year or more and less than a recommended average of thirty-six (36) primary percutaneous coronary interventions per year over three (3) consecutive preceding years. The following requirements for option two shall be met to qualify for a level II center designation:

- A. If a STEMI center performs less than an annual recommended average of thirty-six (36) primary percutaneous coronary interventions over three (3) consecutive preceding years, it is recommended that the STEMI center perform an annual average of two hundred (200) or more elective percutaneous coronary interventions over three (3) consecutive preceding years, and it is recommended that all operators shall perform seventy-five (75) or more elective percutaneous coronary interventions and eleven (11) or more primary percutaneous coronary interventions per year. If an operator does not perform a recommended eleven (11) or more primary percutaneous coronary interventions per year, he or she shall have a mentoring relationship defined by written agreement with a highly experienced operator. This mentor may be a member of the same institution or belong to another institution. This relationship, established by a written agreement, may include, but not be limited to, on-site supervision and observation of performance during primary and elective percutaneous coronary interventions per year, review of mentee's patient encounters, review of mentee's outcomes, evaluation of mentee and hospital's process pertaining to elective and primary percutaneous coronary interventions, and guidance on methods to improve process, performance, and outcomes; or

- B. If a STEMI center performs less than an annual recommended average of two hundred (200) elective percutaneous coronary interventions over three (3) consecutive preceding years, it is recommended that the STEMI center perform an annual average of thirty-six (36) primary percutaneous coronary interventions over three (3) consecutive preceding years, and it is recommended that all operators perform seventy-five (75) or more elective percutaneous coronary interventions and eleven (11) or more primary percutaneous coronary interventions per year or have a mentoring relationship defined by a written agreement with a highly experienced operator. This mentor may be a member of the same institution or belong to another institution. This relationship, established by a written agreement, may include, but not be limited to, on-site supervision and observation of performance during primary and elective percutaneous coronary interventions, review of mentee's patient encounters, review of mentee's outcomes, evaluation of mentee and hospital's process pertaining to elective and primary percutaneous coronary interventions, and guidance on methods to improve process, performance, and outcomes; and

- C. Be able to provide on-site emergency cardiothoracic surgical services or have a written plan that has been shown to be effective, a transfer agreement, and expedited transfer process for cardiothoracic surgery back-up in a nearby STEMI center with appropriate hemodynamic support capability for transfer. The written plan shall ensure that once a potential need for cardiothoracic intervention is identified, the STEMI patient can be evaluated by cardiothoracic surgery and in the operating room of the receiving hospital as expeditiously as possible; and (II-R)

- D. Provide cardiac intensive care capability; and (II-R)

- E. Provide evidence of a written plan shown to be effective, a transfer agreement, and expedited transfer process for STEMI patients to higher level care in a nearby STEMI center with appropriate hemodynamic support capability for transfer; and (II-R)

- F. The STEMI center shall collect, document, maintain for at least five (5) years and make available for review by the department the following:

- (I) The STEMI center's average time from the STEMI center door to percutaneous coronary interventions device inflation time (i.e., door-to-balloon (D2B) times) is no more than ninety (90) minutes at least seventy-five percent (75%) of the time; and (II-R)

- (II) The STEMI center tracks and compares the time from the first medical contact to balloon times; and (II-R)

- G. The STEMI center shall document that it collects and trends its past and current risk-adjusted outcome and process measures. (II-R)

- (G) The STEMI center shall appoint a physician to serve as the STEMI medical director with appropriate qualifications, experience,

and training. A STEMI medical director shall be appointed at all times with no lapses. (I-R, II-R, III-R, IV-R)

1. Level I and II STEMI center medical directors shall be cardiologists or interventional cardiologists. It is recommended that the cardiologist or interventional cardiologist be board-certified or board-admissible in interventional cardiology or cardiology. (I-R, II-R)

2. Level III and IV STEMI center medical directors shall be physicians. A board-certified or board-admissible physician is recommended. (III-R, IV-R)

3. The STEMI center shall have a job description and organization chart depicting the relationship between the STEMI medical director and other services. (I-R, II-R, III-R, IV-R)

4. Level I and II STEMI medical directors are recommended to be members of the catheterization lab team call roster. (I-R, II-R)

5. The STEMI medical director shall meet the continuing medical education (CME) requirements as described in section (4) of this rule. (I-R, II-R, III-R, IV-R)

6. The STEMI medical director shall be responsible for oversight of the education and training of the medical and clinical staff in STEMI care. This includes a review of the appropriateness of the education and training for the practitioner's level of responsibility. (I-R, II-R, III-R, IV-R)

7. Level I STEMI medical directors shall participate in the STEMI center's research and publication projects. (I-R)

(H) The STEMI center shall have a STEMI program coordinator/manager who is a registered nurse, other clinical staff, or qualified individual. The STEMI center shall have a STEMI program coordinator/manager at all times with no lapses. (I-R, II-R, III-R, IV-R)

1. The STEMI center shall have a job description and organization chart depicting the relationship between the STEMI program coordinator/manager and other services. (I-R, II-R, III-R, IV-R)

2. The STEMI coordinator/manager shall meet continuing education requirements as described in section (4) of this rule. (I-R, II-R, III-R, IV-R)

3. The STEMI program coordinator/manager shall participate in the formal STEMI center performance improvement and patient safety program. (I-R, II-R, III-R, IV-R)

(I) The STEMI center shall document a plan for and utilization of a specific and well-organized system as appropriate to center level designation for the emergency department to rapidly notify and activate the STEMI team or STEMI/cardiac catheterization lab team at the time the emergency department identifies STEMI on electrocardiogram (ECG) or verifies emergency medical services (EMS) STEMI electrocardiogram identification. (I-R, II-R, III-R, IV-R)

(J) The STEMI center shall have a protocol detailing a one- (1-) call cardiac catheterization lab activation by emergency medical services at the time emergency medical services identifies a STEMI patient and as appropriate to the hospital's process. (I-R, II-R)

(K) The STEMI center shall have a one- (1-) call STEMI team activation protocol or a STEMI/cardiac catheterization lab team activation protocol as appropriate for center level designation that establishes the following:

1. The criteria used to triage STEMI patients; (I-R, II-R, III-R, IV-R)

2. The person authorized to notify STEMI team or STEMI team/cardiac catheterization lab team members when a suspected STEMI patient is in route or when a suspected STEMI patient has arrived at the STEMI center; and (I-R, II-R, III-R, IV-R)

3. The method for immediate notification and the response requirements for STEMI team or STEMI/cardiac catheterization lab team members when a suspected STEMI patient is in route to the STEMI center. (I-R, II-R, III-R, IV-R)

(L) All members of the STEMI team or STEMI/cardiac catheterization lab team call roster shall comply with the availability and response requirements. If not on STEMI center premises, then STEMI/cardiac catheterization lab team members who are on call

shall carry electronic communication devices at all times to permit contact by the STEMI center and shall be promptly available. (I-R, II-R, III-R, IV-R)

(M) The STEMI centers shall have a fibrinolysis protocol for instances when percutaneous coronary intervention is not achievable within an appropriate designated time frame and for when fibrinolysis is achievable within an appropriate designated time frame. It is recommended that the designated time frame follow nationally acceptable standards, for example as set forth in Appendix A number eight (8) entitled "Time to Fibrinolytic Therapy" included in the article entitled "ACC/AHA Clinical Performance Measures for Adults with ST-Elevation and Non-ST-Elevation Myocardial Infarction: A Report of the American College of Cardiology/American Heart Association Task Force on Performance Measures (Writing Committee to Develop Performance Measures on ST-Elevation and Non-ST-Elevation Myocardial Infarction)" as published by the Journal of the American College of Cardiology in 2006, volume 47, pages 236-265 which is incorporated by reference in this rule and is available at the Journal of the American College of Cardiology, Reprint Department Elsevier Inc., 360 Park Avenue South, New York, NY 10010-1710 or on the Journal of the American College of Cardiology website at <http://content.onlineJACC.org>. This rule does not incorporate any subsequent amendments or additions. (I-R, II-R, III-R, IV-R)

(N) STEMI centers shall have transfer agreements between referring and receiving facilities. (II-R, III-R, IV-R)

1. The STEMI center shall have a one- (1-) call transfer protocol to a level I or level II designated STEMI center that establishes the criteria used to triage STEMI patients and identifies the persons authorized to notify the designated STEMI center. (II-R, III-R, IV-R)

2. The STEMI center shall have a rapid transfer process in place to transport a STEMI patient to a higher level of STEMI care when needed. (II-R, III-R, IV-R)

(O) STEMI centers shall have cardiac rehabilitation services directed by a physician experienced in cardiac rehabilitation. (I-R, II-R)

(P) The STEMI centers shall demonstrate that there is a plan for adequate post-discharge and post-transfer follow-up on STEMI patients, including cardiac rehabilitation and repatriation if indicated. (I-R, II-R, III-R, IV-R)

(Q) The STEMI center shall maintain a STEMI patient log, keep this log for a period of five (5) years, and make this log readily retrievable during a review by the department. This patient log shall include all STEMI patients and shall contain the following information:

1. Response times; (I-R, II-R, III-R, IV-R)

2. Patient diagnosis; (I-R, II-R, III-R, IV-R)

3. Treatment/actions; (I-R, II-R, III-R, IV-R)

4. Outcomes; (I-R, II-R, III-R, IV-R)

5. Number of patients; and (I-R, II-R, III-R, IV-R)

6. Benchmark indicators. (I-R, II-R, III-R, IV-R)

(R) Level I, II, and III STEMI centers shall have a lighted designated helicopter landing area at the STEMI center to accommodate incoming medical helicopters. (I-R, II-R, III-R)

1. The landing area shall serve solely as the receiving and take-off area for medical helicopters and shall be cordoned off at all times from the general public to assure its continual availability and safe operation. (I-R, II-R, III-R)

2. The landing area shall be on the hospital premises no more than three (3) minutes from the emergency room. (I-R, II-R, III-R)

(S) Level IV STEMI centers shall have a lighted designated helicopter landing area that meets the following requirements:

1. Accommodates incoming medical helicopters; (IV-R)

2. Serves as the receiving and take-off area for medical helicopters; (IV-R)

3. Cordoned off from the general public when in use; (IV-R)

4. Managed to assure its continual availability and safe operation; and (IV-R)

5. It is recommended the landing area shall be no more than three (3) minutes from the emergency department. (IV-R)

(T) STEMI centers shall enter data into the Missouri STEMI registry as follows:

1. All STEMI centers shall submit data into the department's Missouri STEMI registry on each STEMI patient who is admitted to the STEMI center, transferred out of the STEMI center, or dies as a result of the STEMI (independent of hospital admission or hospital transfer status). The data required to be submitted into the Missouri STEMI registry by the STEMI centers is listed and explained in the document entitled "Time Critical Diagnosis ST-Segment Elevation Myocardial Infarction (STEMI) Center Registry Data Elements" dated March 1, 2012, which is incorporated by reference in this rule and is available at the Missouri Department of Health and Senior Services, PO Box 570, Jefferson City, MO 65102-0570 or on the department's website at [www.health.mo.gov](http://www.health.mo.gov). This rule does not incorporate any subsequent amendments or additions; (I-R, II-R, III-R, IV-R)

2. The data required in paragraph (1)(T)1. above shall be submitted electronically into the Missouri STEMI registry via the department's website at [www.health.mo.gov](http://www.health.mo.gov); (I-R, II-R, III-R, IV-R)

3. This data required in paragraph (1)(T)1. above shall be submitted electronically into the Missouri STEMI registry on at least a quarterly basis for that calendar year. STEMI centers have ninety (90) days after the quarter ends to submit the data electronically into the Missouri STEMI registry; (I-R, II-R, III-R, IV-R)

4. The data submitted by the STEMI centers shall be complete and current; and (I-R, II-R, III-R, IV-R)

5. The data submitted by the STEMI centers shall be managed in compliance with the confidentiality requirements and procedures contained in section 192.067, RSMo. (I-R, II-R, III-R, IV-R)

(U) A STEMI center shall maintain a diversion protocol for the STEMI center that is designed to allow best resource management within a given area. The STEMI center shall create criteria for diversion in this diversion protocol and shall detail a performance improvement and patient safety process in the diversion protocol to review and validate the criteria for diversion created by the STEMI center. The STEMI center shall also collect, document, and maintain diversion information that includes at least the date, length of time, and reason for diversion. This diversion information shall be readily retrievable by the STEMI center during a review by the department and shall be kept by the STEMI center for a period of five (5) years. (I-R, II-R, III-R, IV-R)

## (2) Medical Staffing Standards for STEMI Center Designation.

(A) There shall be a delineation of privileges for the cardiologists, cardiothoracic surgeons, and interventional cardiologists made by the medical staff credentialing committee in each STEMI center. (I-R, II-R)

(B) The STEMI center shall credential and have different types of physicians available as listed below—

1. A cardiologist; (I-R/PA, II-R/PA)
2. An interventional cardiologist; (I-R/PA, II-R/PA)
3. A cardiothoracic surgeon as follows:

A. A cardiothoracic surgeon and back-up coverage shall be available for level I STEMI centers and for those level II STEMI centers which provide cardiothoracic surgery; or (I-R/PA, II-R/PA)

B. A cardiothoracic surgeon and back-up coverage arrangements with a level I STEMI center or a level II STEMI center which provides cardiothoracic surgery shall be available for those level II STEMI centers that do not provide cardiothoracic surgery to ensure that the STEMI patient is in the operating room of the receiving STEMI center as expeditiously as possible, recommended within sixty (60) minutes of the time surgery is determined needed; (II-R)

4. An emergency department physician; (I-R/IH, II-R/IH, III-R/IH, IV-R/IA)

5. An internal medicine physician; (I-R/PA, II-R/PA, III-R/PA)

6. A diagnostic radiologist; and (I-R/IA, II-R/IA, III-R/IA, IV-R/PA)

7. An anesthesiologist. (I-PA, II-PA)

A. Anesthesiology staffing requirements may be fulfilled by anesthesiology residents or certified registered nurse anesthetists (CRNA), or anesthesia assistants capable of assessing emergent situations in STEMI patients and of providing any indicated treatment including induction of anesthesia. When anesthesiology residents or CRNA's are used to fulfill availability requirements, the staff anesthesiologist on call will be advised and be promptly available and present for all operative interventions and emergency airway conditions. The CRNA may proceed with life preserving therapy while the anesthesiologist is in route under the direction of the cardiologist/cardiovascular surgeon, including induction of anesthesia. An anesthesiologist assistant shall practice only under the direct supervision of an anesthesiologist who is physically present or immediately available as this term is defined in section 334.400, RSMo. (I-PA, II-PA)

(3) Standards for Hospital Resources and Capabilities for STEMI Center Designation.

(A) The STEMI center shall meet emergency department standards listed below.

1. The emergency department staffing shall meet the following requirements:

A. The emergency department in the STEMI center shall provide immediate and appropriate care of the STEMI patient; (I-R, II-R, III-R, IV-R)

B. A level I STEMI center shall have a medical director of the emergency department who shall be a board-certified or board-admissible physician in emergency medicine by the American Board of Medical Specialties, the Bureau of Osteopathic Specialties and Boards of Certification, or the Royal College of Physicians and Surgeons of Canada; (I-R)

C. A level II STEMI center shall have a medical director of the emergency department who shall be a board-certified or board-admissible physician; (II-R)

D. A level III and IV STEMI center shall have a medical director of the emergency department who is recommended to be a board-certified or board-admissible physician; (III-R, IV-R)

E. There shall be an emergency department physician credentialed for STEMI care covering the emergency department twenty-four (24) hours a day, seven (7) days a week; (I-R/IH, II-R/IH, III-R/IH, IV-R/IA)

F. The emergency department physician who provides coverage shall be current in continuing medical education (CME) in the area of cardiovascular disease as set forth in section (4) of this rule; (I-R, II-R, III-R, IV-R)

G. There shall be a written policy defining the organizational relationship of the emergency department physicians to other physician members of the STEMI team; (I-R, II-R, III-R, IV-R)

H. Registered nurses in the emergency department shall be current in continuing education requirements as set forth in section (4) of this rule; (I-R, II-R, III-R, IV-R)

I. At a minimum, all registered nurses assigned to the emergency department shall be determined to be credentialed in the care of the STEMI patient by the STEMI center within one (1) year of assignment in the emergency department, and these registered nurses shall remain current in continuing education requirements as set forth in section (4) of this rule; and (I-R, II-R, III-R, IV-R)

J. The emergency department in STEMI centers shall have written care protocols for identification, triage, and treatment of acute STEMI patients that are available to emergency department personnel, reviewed annually, and revised as needed. (I-R, II-R, III-R, IV-R)

2. Nursing documentation for the STEMI patient shall be on a STEMI flow sheet approved by the STEMI medical director and the STEMI program manager/coordinator. (I-R, II-R, III-R, IV-R)

3. The emergency department shall have at least the following equipment for resuscitation and life support available to the unit:

A. Airway control and ventilation equipment including:

- (I) Laryngoscopes; (I-R, II-R, III-R, IV-R)
- (II) Endotracheal tubes; (I-R, II-R, III-R, IV-R)
- (III) Bag-mask resuscitator; (I-R, II-R, III-R, IV-R)
- (IV) Sources of oxygen; and (I-R, II-R, III-R, IV-R)
- (V) Mechanical ventilator; (I-R, II-R, III-R)

B. Suction devices; (I-R, II-R, III-R, IV-R)

C. Electrocardiograph, cardiac monitor, and defibrillator; (I-R, II-R, III-R, IV-R)

D. Central line insertion equipment; (I-R, II-R, III-R)

E. All standard intravenous fluids and administration devices including intravenous catheters and intraosseous devices; (I-R, II-R, III-R, IV-R)

F. Drugs and supplies necessary for STEMI emergency care; (I-R, II-R, III-R, IV-R)

G. Two- (2-) way communication link with emergency medical service (EMS) vehicles; (I-R, II-R, III-R, IV-R)

H. Equipment necessary to communicate with emergency medical services regarding pre-hospital ECG STEMI findings; (I-R, II-R, III-R, IV-R)

I. End-tidal carbon dioxide monitor; (I-R, II-R, III-R, IV-R)

J. Temperature control devices for patient and resuscitation fluids; (I-R, II-R, III-R, IV-R)

K. External pacemaker; and (I-R, II-R, III-R, IV-R)

L. Transvenous pacemaker. (I-R/IA, II-R/IA, III-R/IA)

4. The STEMI center emergency department shall maintain all equipment according to the hospital preventive maintenance schedule and document when the equipment is checked. (I-R, II-R, III-R, IV-R)

(B) The STEMI center shall have a designated intensive care unit (ICU). (I-R, II-R)

1. The STEMI center intensive care unit shall ensure staffing to provide appropriate care of the STEMI patient. (I-R, II-R)

A. The STEMI center intensive care unit shall have a designated medical director who has twenty-four (24) hours a day, seven (7) days a week access to a physician knowledgeable in STEMI care who meets the STEMI call roster continuing education requirements as set forth in section four (4) of this rule. (I-R, II-R)

B. The STEMI center intensive care unit shall have a physician on duty or available twenty-four (24) hours a day, seven (7) days a week in the STEMI center who is not the emergency department physician. This physician shall have access to a physician on the STEMI call roster. (I-R, II-R)

C. The STEMI center intensive care unit shall have a one to one (1:1) or one to two (1:2) registered nurse/patient ratio used for critically ill patients requiring intensive care unit level care. (I-R, II-R)

D. Registered nurses in the STEMI center intensive care unit shall annually maintain core competencies in the care of the STEMI patient and remain current in continuing education requirements as set forth in section (4) of this rule. (I-R, II-R)

2. The STEMI center intensive care unit shall have written care protocols for identification and treatment of acute STEMI patients which are available to intensive care unit personnel, reviewed annually, and revised as needed. (I-R, II-R)

3. The STEMI center intensive care unit shall have intensive care unit beds for STEMI patients or, if space is not available in the intensive care unit, the STEMI center shall make arrangements to provide the comparable level of care until space is available in the intensive care unit. (I-R, II-R)

4. The STEMI center intensive care unit shall have equipment available for resuscitation and to provide life support for the STEMI patient. This equipment shall include at least the following:

A. Airway control and ventilation equipment including laryngoscopes, endotracheal tubes, bag-mask resuscitator, and a mechanical ventilator; (I-R, II-R)

B. Oxygen source with concentration controls; (I-R, II-R)

C. Cardiac emergency cart, including medications:

(I) External pacemaker; and (I-R, II-R)

(II) Transvenous pacemaker; (I-R, II-R)

D. Telemetry, electrocardiograph, cardiac monitor, and defibrillator; (I-R, II-R)

E. Electronic pressure monitoring and pulse oximetry; (I-R, II-R)

F. End-tidal carbon dioxide monitor; (I-R, II-R)

G. Patient weighing devices; and (I-R, II-R)

H. Drugs, intravenous fluids, and supplies. (I-R, II-R)

5. The STEMI center intensive care unit shall check all equipment according to the hospital preventive maintenance schedule and document when it is checked. (I-R, II-R)

(C) The STEMI center shall have a cardiac catheterization lab. (I-R, II-R)

1. The STEMI center cardiac catheterization lab shall have angiography with interventional capability available twenty-four (24) hours a day, seven (7) days a week. (I-R/PA, II-R/PA)

2. All members of the STEMI center catheterization lab and team shall maintain core competencies annually as required by the STEMI center. (I-R, II-R)

3. Resuscitation equipment shall be readily available in the STEMI center catheterization lab. (I-R, II-R)

4. The following diagnostic equipment shall be readily available in the STEMI center cardiac catheterization lab:

A. Sheaths; (I-R, II-R)

B. Diagnostic wires; (I-R, II-R)

C. Diagnostic catheters; (I-R, II-R)

D. Manifold or contrast injector/delivery system; and (I-R, II-R)

E. Pressure tubing. (I-R, II-R)

5. The following interventional equipment shall be readily available in the STEMI center cardiac catheterization lab:

A. Sheaths; (I-R, II-R)

B. Interventional guide wires; (I-R, II-R)

C. Interventional guide catheters; (I-R, II-R)

D. Balloon catheters—

(I) Compliant; and (I-R, II-R)

(II) Non-compliant; (I-R, II-R)

E. Stents—

(I) Bare metal stents; and (I-R, II-R)

(II) Drug eluting stents; (I-R, II-R)

F. Balloon pump catheters; and (I-R, II-R)

G. Thrombectomy aspiration catheters or mechanical thrombectomy device. (I-R, II-R)

6. The following equipment shall be readily available to the STEMI center cardiac catheterization lab:

A. Balloon pump; (I-R, II-R)

B. The level I STEMI center cardiac catheterization labs shall have percutaneous or surgically implanted circulatory assist devices (i.e., left ventricular assistive device (LVAD)). It is also recommended that the level II STEMI center cardiac catheterization labs have left ventricular assistive devices; and (I-R)

C. Embolic protection device. (I-R, II-R)

7. The cardiac catheterization laboratory shall maintain equipment according to the STEMI center's preventive maintenance schedule and document when the equipment is checked. (I-R, II-R)

(D) The STEMI center shall have an intermediate care unit (e.g., step down unit). (I-R, II-R, III-R)

1. The STEMI center shall have a designated medical director for the STEMI center intermediate care unit who has access to a physician knowledgeable in STEMI care and who meets the STEMI call roster continuing medical education requirements as set forth in section (4) of this rule. (I-R, II-R, III-R)

2. The STEMI center intermediate care unit shall have a physician on duty or available twenty-four (24) hours a day, seven (7) days a week who is not the emergency department physician. This physician shall have access to a physician on the STEMI call roster. (I-R/IA, II-R/IA, III-R/IA)

3. The STEMI center intermediate care unit shall have registered nurses and other essential personnel on duty twenty-four (24) hours a day, seven (7) days a week. (I-R, II-R, III-R)

4. The STEMI center intermediate care unit registered nurses shall remain current in continuing education requirements as set forth in section (4) of this rule. (I-R, II-R, III-R)

5. The STEMI centers shall annually credential registered nurses that work in the intermediate care unit. (I-R, II-R, III-R)

6. The STEMI center intermediate care unit shall have written care protocols for identification and treatment of STEMI patients which are available to the cardiac unit personnel, reviewed annually, and revised as needed. (I-R, II-R, III-R)

7. The STEMI center intermediate care unit shall have equipment to support the care and resuscitation of the STEMI patient that includes at least the following:

A. Airway control and ventilation equipment including:

(I) Laryngoscopes, endotracheal tubes of all sizes; (I-R, II-R, III-R)

(II) Bag-mask resuscitator and sources of oxygen; and (I-R, II-R, III-R)

(III) Suction devices; and (I-R, II-R, III-R)

B. Telemetry, electrocardiograph, cardiac monitor, and defibrillator; (I-R, II-R, III-R)

C. All standard intravenous fluids and administration devices and intravenous catheters; and (I-R, II-R, III-R)

D. Drugs and supplies necessary for emergency care. (I-R, II-R, III-R)

8. The STEMI center intermediate care unit shall maintain equipment according to the STEMI center's preventive maintenance schedule and document when the equipment is checked. (I-R, II-R, III-R)

(E) The STEMI center shall have the following radiological and diagnostic capabilities:

1. The STEMI center radiological and diagnostic capabilities shall include a mechanism for timely interpretation to aid in the management of STEMI patients; (I-R, II-R, III-R, IV-R)

2. Resuscitation equipment shall be readily available in the radiology department; (I-R, II-R, III-R, IV-R)

3. The STEMI center radiology department shall have adequate physician and nursing personnel available with monitoring equipment to fully support the STEMI patient and provide documentation of care during the time the patient is physically present in the radiology department and during transportation to and from the radiology department; (I-R, II-R, III-R, IV-R)

4. The STEMI center radiology department shall have x-ray capability with twenty-four (24) hours a day, seven (7) days a week coverage; (I-R/PA, II-R/PA, III-R/PA, IV-R/PA)

5. The STEMI center radiology department shall have a radiological technician; (I-R/PA, II-R/PA, III-R/PA, IV-R/PA)

6. The STEMI center radiology department shall have in-house computerized tomography; (I-R, II-R)

7. The STEMI center radiology department shall have a computerized tomography technician; and (I-R/PA, II-R/PA)

8. The STEMI center shall maintain all radiology and diagnostic equipment according to the hospital preventive maintenance schedule and document when the equipment is checked. (I-R, II-R, III-R, IV-R)

(F) All level I STEMI centers and level II STEMI centers with cardiothoracic surgery capability shall have operating room personnel, equipment and procedures that meet the following requirements:

1. The STEMI center operating room staff shall be available twenty-four (24) hours a day, seven (7) days a week; (I-R/PA, II-R/PA with cardiothoracic surgery capability)

2. Registered nurses in the STEMI center operating room shall maintain core competencies annually as required by the STEMI center; (I-R/PA, II-R/PA with cardiothoracic surgery capability)

3. The STEMI center shall provide twenty-four (24) hours a day, seven (7) days a week heart team coverage. This heart team includes physicians, perfusionists, and qualified individuals on call

and available to provide cardiothoracic surgery; (I-R/PA, II-R/PA with cardiothoracic surgery capability)

4. The STEMI center operating rooms shall have at least the following equipment:

A. Thermal control equipment for patient and resuscitation fluids; (I-R/PA, II-R/PA with cardiothoracic surgery capability)

B. X-ray capability; (I-R/PA, II-R/PA with cardiothoracic surgery capability)

C. Instruments and equipment necessary for cardiothoracic surgical services; (I-R/PA, II-R/PA with cardiothoracic surgery capability)

D. Patient monitoring equipment; and (I-R/PA, II-R/PA with cardiothoracic surgery capability)

E. Resuscitation equipment readily available to the operating room; and (I-R/PA, II-R/PA with cardiothoracic surgery capability)

5. The STEMI center operating room shall maintain all equipment according to the STEMI center's preventive maintenance schedule and document when the equipment is checked. (I-R/PA, II-R/PA with cardiothoracic surgery capability)

(G) All level I STEMI centers shall meet post-anesthesia recovery room (PAR) requirements as set out below. Those level II STEMI centers with cardiothoracic surgery capability shall also have a post-anesthesia recovery room and meet the requirements as set out below. (I-R/PA, II-R/PA with cardiothoracic surgery capability)

1. The STEMI center post-anesthesia recovery rooms shall have registered nurses and other essential personnel on call and available within sixty (60) minutes twenty-four (24) hours a day, seven (7) days a week. (I-R, II-R with cardiothoracic surgery capability)

2. Registered nurses who work in the STEMI center post-anesthesia recovery room shall maintain core competencies annually as required by the STEMI center. (I-R, II-R with cardiothoracic surgery capability)

3. The STEMI center post-anesthesia recovery rooms shall have at least the following equipment for resuscitation and to provide life support for the STEMI patient:

A. Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes, bag-mask resuscitator, sources of oxygen, and mechanical ventilator; (I-R, II-R with cardiothoracic surgery capability)

B. Suction devices; (I-R, II-R with cardiothoracic surgery capability)

C. Telemetry, electrocardiograph, cardiac monitor, and defibrillator; (I-R, II-R with cardiothoracic surgery capability)

D. All standard intravenous fluids and administration devices, including intravenous catheters; and (I-R, II-R with cardiothoracic surgery capability)

4. Drugs and supplies necessary for emergency care. (I-R/PA, II-R/PA with cardiothoracic surgery capability)

5. The STEMI center post-anesthesia recovery room shall maintain all equipment according to the STEMI center's preventive maintenance schedule and document when the equipment is checked. (I-R, II-R with cardiothoracic surgery capability)

(H) The STEMI center shall have clinical laboratory services available twenty-four (24) hours a day, seven (7) days a week. (I-R, II-R, III-R, IV-R)

1. The STEMI center's clinical laboratory services shall have a written protocol to provide timely availability of results. (I-R, II-R, III-R, IV-R)

2. The STEMI center's clinical laboratory services shall be able to conduct standard analyses of blood, urine, and other body fluids. (I-R, II-R, III-R, IV-R)

3. The STEMI center's clinical laboratory services shall be able to conduct blood typing and cross-matching. (I-R, II-R, III-R)

4. The STEMI center's clinical laboratory services shall be able to conduct coagulation studies. (I-R, II-R, III-R, IV-R)

5. Clinical laboratory services at level I, II, and III STEMI centers shall include a comprehensive blood bank or access to a community central blood bank and adequate hospital blood storage facilities. (I-R, II-R, III-R)

6. Clinical laboratory services at level IV STEMI centers shall include a blood bank or access to a community central blood bank and adequate hospital blood storage facilities. (IV-R)

7. The STEMI center's clinical laboratory services shall be able to perform blood gases and pH determinations. (I-R, II-R, III-R, IV-R)

8. The STEMI center's clinical laboratory services shall be able to perform blood chemistries. (I-R, II-R, III-R, IV-R)

9. The STEMI center's clinical laboratory services shall have a written protocol for prioritization of the STEMI patient in comparison to other time critical patients. (I-R, II-R, III-R, IV-R)

(I) The STEMI center shall have support services to assist the STEMI patient's family from the time of entry into the facility to the time of discharge or transfer, and the support services that were provided shall be documented. (I-R, II-R, III-R, IV-R)

(J) The STEMI center shall have cardiac rehabilitation or a written network agreement for the provision of cardiac rehabilitation. (I-R, II-R, III-R)

1. Level I and level II STEMI centers shall have Phase I cardiac rehabilitation on site. (I-R, II-R)

(4) Continuing Medical Education (CME) and Continuing Education Standards for STEMI Center Designation.

(A) The STEMI center shall ensure that staff providing services to STEMI patients receive continued medical education and continuing education as set forth in section (4) of this rule and document this education for each staff member. The department shall allow up to one (1) year from the date of the STEMI center's initial STEMI center designation for STEMI center staff members to complete all of the required continuing medical education and/or continuing education requirements if the STEMI center staff documents that at least half of the required continuing medical education and continuing education hours have been completed for each STEMI center staff at the time of the on-site initial application review. The STEMI center shall submit documentation to the department within one (1) year of the initial designation date that all continued medical education and continuing education requirements for STEMI center staff members have been met in order to maintain the STEMI center's designation. (I-R, II-R, III-R, IV-R)

(B) The STEMI call roster members shall complete the following continuing education requirements:

1. Core team members of the STEMI call roster in level I and level II STEMI centers shall document a minimum of ten (10) hours every year of continuing education in the area of acute coronary syndrome. All other members of the STEMI call roster shall document a minimum of ten (10) hours every year of continuing education in the area of cardiovascular disease. This continuing education shall be reviewed by the STEMI center medical director for appropriateness to the practitioner's level of responsibility; and (I-R, II-R)

2. All members of the STEMI call roster in level III and level IV STEMI centers shall document a minimum of eight (8) hours every two (2) years of continuing education in the area of cardiovascular disease. This continuing education shall be reviewed by the STEMI center medical director for appropriateness to the practitioner's level of responsibility. (III-R, IV-R)

(C) The STEMI center medical director shall complete the following continuing medical education requirements:

1. Level I and II STEMI medical directors shall document a minimum average of ten (10) hours every year in the area of acute coronary syndrome; (I-R, II-R)

2. The level III and IV STEMI medical directors that are board-certified or board-eligible shall document a minimum average of eight (8) hours every other year of continuing medical education in the area of cardiovascular disease; and (III-R, IV-R)

3. The level III and IV STEMI medical directors who are not board-certified or board-eligible shall document:

A. A minimum average of ten (10) hours every two (2) years of continuing medical education in the area of cardiovascular disease

with a focus on acute coronary syndrome; and (III-R, IV-R)

B. Attend one (1) national, regional, or state meeting every three (3) years in cardiovascular disease. Continuing medical education earned at these meetings can count toward the ten (10) continuing medical education hours required. (III-R, IV-R)

(D) The STEMI center's STEMI program manager/coordinator shall complete the following continuing education requirements:

1. A level I STEMI program coordinator/manager shall complete and document the following:

A. A minimum average of ten (10) hours every year of continuing education in the area of cardiovascular disease. This continuing education shall be reviewed for appropriateness by the STEMI center medical director to the STEMI program manager's/coordinator's level of responsibility; and (I-R)

B. Attend one (1) national, regional, or state meeting every two (2) years focused on cardiovascular disease. If the national, regional, or state meeting provides continuing education, that continuing education may count towards the annual requirement; (I-R)

2. A level II STEMI program coordinator/manager shall complete and document the following:

A. A minimum average of eight (8) hours every year of continuing education in the area of cardiovascular disease. This continuing education shall be reviewed by the STEMI center medical director for appropriateness to the STEMI program manager's/coordinator's level of responsibility; and (II-R)

B. Attend one (1) national, regional, or state meeting every three (3) years focused on cardiovascular disease. If the national, regional, or state meeting provides continuing education, that continuing education may count toward the annual requirement; and (II-R)

3. The level III and IV STEMI program coordinator/manager shall complete and document a minimum average of eight (8) hours every other year of continuing education in the area of cardiovascular disease. This continuing education shall be reviewed for appropriateness by the STEMI center medical director to the STEMI program manager's/coordinator's level of responsibility. (III-R, IV-R)

(E) STEMI center emergency department personnel shall complete the continuing education requirements for STEMI centers that are detailed below.

1. The emergency department physician(s) shall be current in cardiovascular continuing medical education. (I-R, II-R, III-R, IV-R)

A. Emergency department physicians in level I and II STEMI centers shall complete and document a minimum average of four (4) hours every year of continuing medical education in the area of cardiovascular disease. (I-R, II-R)

B. Emergency department physicians in level III and IV STEMI centers shall complete and document a minimum average of six (6) hours every two (2) years of continuing medical education in the area of cardiovascular disease. (III-R, IV-R)

2. Registered nurses assigned to the emergency department shall complete the following requirements:

A. Registered nurses assigned to the emergency department at level I and II STEMI centers shall complete and document a minimum of four (4) hours of continuing education every year in the area of cardiovascular disease; (I-R, II-R)

B. Registered nurses assigned to the emergency department at level III and IV STEMI centers shall complete and document a minimum of six (6) hours of continuing education every two (2) years in the area of cardiovascular disease; and (III-R, IV-R)

C. Registered nurses assigned to the emergency department at STEMI centers shall maintain core competencies in the care of the STEMI patient annually as determined by the STEMI center. Continuing education earned in training to maintain these competencies may count toward continuing education requirements. (I-R, II-R, III-R, IV-R)

(F) Registered nurses assigned to the intensive care unit who provide care to STEMI patients shall complete the following continuing education requirements:

1. Registered nurses in the intensive care unit shall complete and document a minimum of eight (8) hours every year of continuing education in the area of cardiovascular disease. This continuing education shall be reviewed for appropriateness by the STEMI center medical director to the practitioner's level of responsibility. (I-R, II-R).

(G) Registered nurses and clinical staff assigned to the cardiac catheterization lab shall complete the following continuing education requirements:

1. Registered nurses and clinical staff shall complete and document a minimum of eight (8) hours of continuing education every year in the area of acute coronary syndrome. This continuing education shall be reviewed for appropriateness by the STEMI center medical director to the practitioner's level of responsibility. (I-R, II-R)

(H) Registered nurses assigned to the intermediate care unit shall complete the following continuing education requirements:

1. Intermediate care unit registered nurses in level I and level II STEMI centers shall complete and document a minimum of eight (8) hours every year of continuing education in the area of cardiovascular disease. This continuing education shall be reviewed for appropriateness by the STEMI center medical director to the practitioner's level of responsibility; and (I-R, II-R)

2. Intermediate care unit registered nurses in level III STEMI centers shall complete and document a minimum of eight (8) hours of continuing education every two (2) years in the area of cardiovascular disease. This continuing education shall be reviewed for appropriateness by the STEMI center medical director to the practitioner's level of responsibility. (III-R)

(5) Standards for Hospital Performance Improvement, Patient Safety, Outreach, Public Education, and Training Programs for STEMI Center Designation.

(A) The STEMI center shall maintain an ongoing performance improvement and patient safety program designed to objectively and systematically monitor, review, and evaluate the quality, timeliness, and appropriateness of patient care, to resolve problems, and to improve patient care. (I-R, II-R, III-R, IV-R)

1. The STEMI center shall collect, document, trend, maintain for at least five (5) years, and make available for review by the department at least the following data elements:

- A. Any STEMI center that performs percutaneous coronary interventions shall report all percutaneous coronary intervention-related data, including the time from first medical contact or pre-hospital electrocardiogram STEMI identification to hospital door time and the time from first medical contact to balloon or device time. The percutaneous coronary intervention-related data is set forth and identified in the columns labeled "Level I & II STEMI Centers" and "Only for Level III STEMI Centers which are Performing Percutaneous Coronary Interventions (PCIs) (Only on Patients Receiving Percutaneous Coronary Interventions (PCIs))" in the document entitled "Time Critical Diagnosis ST-Segment Elevation Myocardial Infarction (STEMI) Center Registry Data Elements" dated March 1, 2012, which is incorporated by reference in this rule and is available at the Missouri Department of Health and Senior Services, PO Box 570, Jefferson City, MO 65102-0570 or on the department's website at [www.health.mo.gov](http://www.health.mo.gov). This rule does not incorporate any subsequent amendments or additions; (I-R, II-R, III-R)

- B. Thrombolytic administration time which is the time from first medical contact or pre-hospital electrocardiogram STEMI identification to hospital door time and the time from hospital door to needle time; (I-R, II-R, III-R, IV-R)

- C. Number of STEMI patients presenting within the treatment window for percutaneous coronary interventions and/or thrombolytic administration; (I-R, II-R, III-R, IV-R)

- D. Number of eligible STEMI patients treated with percutaneous coronary intervention and/or thrombolytic administration; and (I-R, II-R, III-R, IV-R)

- E. Time from when STEMI patient presents at the receiving STEMI center to time STEMI patient is in the operating room at the receiving STEMI center. (I-R, II-R if cardiac surgical capability)

2. The STEMI center shall at least quarterly conduct a regular morbidity and mortality review. (I-R, II-R, III-R, IV-R)

3. The STEMI center shall conduct a review of the reports generated by the department from the Missouri STEMI registry. (I-R, II-R, III-R, IV-R)

4. The STEMI center shall conduct a monthly review of its pre-hospital STEMI care including inter-facility transfers. (I-R, II-R, III-R, IV-R)

5. The STEMI center shall participate in the emergency medical services regional system of STEMI care. (I-R, II-R, III-R, IV-R)

6. The STEMI center shall review cases of STEMI patients remaining greater than thirty (30) minutes at the referring hospital prior to transfer as a part of its performance improvement and patient safety program. (I-R, II-R, III-R, IV-R)

7. The STEMI center shall review and monitor the core competencies of its physicians, practitioners, and nurses. (I-R, II-R, III-R, IV-R)

(B) It is recommended that level I and II STEMI centers establish a cardiology outreach program that provides physicians in the outlying areas with telephone access to the cardiology program. (I-R, II-R)

(C) STEMI centers shall establish a patient and public education program to promote STEMI prevention and awareness of signs and symptoms. (I-R, II-R, III-R, IV-R)

(D) Level I, II, and III STEMI centers shall establish a professional education outreach program in catchment areas to provide training and other supports to improve care of STEMI patients. (I-R, II-R, III-R)

(E) Each STEMI center shall establish a training program on caring for STEMI patients for professionals in the STEMI center that includes at least the following:

1. A procedure for training nurses and clinical staff to be credentialed in STEMI care; (I-R, II-R, III-R, IV-R)

2. A mechanism to assure that all nurses providing care to STEMI patients complete a minimum of required continuing education to become credentialed in STEMI care; and (I-R, II-R, III-R, IV-R)

3. The content and format of any STEMI continuing education courses developed and offered by the STEMI center shall be developed with the oversight of the STEMI center medical director. (I-R, II-R, III-R, IV-R)

(F) STEMI centers shall provide and monitor timely feedback to the emergency medical services providers and referring hospital(s), if involved. This feedback shall include, at least, diagnosis, treatment and referring hospital, if involved. It is recommended that the feedback be provided within seventy-two (72) hours of admission to the hospital. When emergency medical services does not provide patient care data on patient arrival or in a timely fashion (recommended within three (3) hours of patient delivery), this time frame shall not apply. (I-R, II-R, III-R, IV-R)

(G) The STEMI centers shall be actively involved in local and regional emergency medical services systems by providing training and clinical educational resources. (I-R, II-R, III-R, IV-R)

(6) Standards for the Programs in STEMI Research for STEMI Center Designation.

(A) The STEMI center and its staff shall support an ongoing research program in STEMI as evidenced by any of the following:

1. Production of evidence based reviews of the STEMI program's process and clinical outcomes; (I-R)

2. Publications in peer-reviewed journals; (I-R)

3. Reports of findings presented at regional or national meetings; (I-R)
  4. Receipt of grants for study of STEMI care; (I-R)
  5. Participation in multi-center studies; or (I-R)
  6. Epidemiological studies and individual case studies. (I-R)
- (B) The STEMI center shall agree to cooperate and participate with the department for the purpose of developing prevention programs. (I-R, II-R, III-R, IV-R)

*AUTHORITY: sections 190.185 and 190.241, RSMo Supp. 2012. Original rule filed Nov. 15, 2012.*

*PUBLIC COST: This proposed rule will cost state agencies or political subdivisions \$288,097,913 for the initial three- (3-) year period and (\$92,714,624) annually thereafter.*

*PRIVATE COST: This proposed rule will cost private entities \$568,174,457 for the initial three- (3-) year period and \$192,915,622 annually thereafter.*

*NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed rule with Teresa Generous, Director, Department of Health and Senior Services, Division of Regulation and Licensure, PO Box 570, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the **Missouri Register**. No public hearing is scheduled.*



FISCAL NOTE  
PUBLIC COST

- I. Department Title: Missouri Department of Health and Senior Services  
 Division Title: Division of Regulation and Licensure  
 Chapter Title: Chapter 40-Comprehensive Emergency Medical Services System

Rule Number and Name:	19 CSR 30-40.760 Standards for ST Segment Elevation Myocardial Infarction (STEMI) Center Designation.
Type of Rulemaking:	Proposed

## II. SUMMARY OF FISCAL IMPACT

Affected Agency or Political Subdivision	Estimated Cost of Compliance in the Aggregate
18 public hospitals	
1 Level I STEMI Center	\$56,507,551 for the first 3 year period and \$18,024,283 for annually thereafter
Level II STEMI Centers	\$102,648,322 for the first 3 year period and \$32,586,306 for annually thereafter
Level III STEMI Centers	\$74,856,912 for the first 3 year period and \$24,461,991 for annually thereafter
Level IV STEMI Centers	\$54,046,528 for the first 3 year period and \$17,635,244 for annually thereafter
Department of Health and Senior Services' Costs	\$38,600 for the first 3 year period and \$6,800 for annually thereafter
Total	\$288,097,913 for the first 3 year period and \$92,714,624 for annually thereafter

## III. WORKSHEET

It is anticipated that most if not all of the STEMI centers voluntarily applying to be designated as STEMI centers will have the staff and equipment required to be the level of STEMI center for which they are applying to be designated. However, the list of required staff and equipment has been detailed below, even if it is assumed the hospital currently meets these requirements.

## 1. Level I STEMI center.

## A. Salary Costs for medical professionals.

- 1) A physician experienced in diagnosing and treating cardiovascular disease - \$359,000 annually X one level I STEMI center = \$359,000 X

- 3 years = \$1,077,000 for the first 3 year period and \$359,000 annually X one level I STEMI center X 1 year = \$359,000 annually thereafter.
- 2) At least 1 other health care professional or qualified individual credentialed in STEMI care - \$126,046 annually X one level I STEMI center = \$126,046 X 3 years = \$378,138 for the first 3 year period and \$126,046 annually X one level I STEMI center X 1 year = \$126,046 annually thereafter.
  - 3) Interventional Cardiologist - \$359,000 annually X one level I STEMI center for the first 3 year period = \$359,000 X 3 years = \$1,077,000 for the first 3 year period and \$359,000 X one level I STEMI center X 1 year = \$359,000 annually thereafter.
  - 4) Other health care professional as deemed necessary in the cardiac catheterization laboratory - \$59,750 annually X one level I STEMI center = \$59,750 X 3 years = \$179,250 for the first 3 year period and \$59,750 annually X one level I STEMI center X 1 year = \$59,750 annually thereafter.
  - 5) STEMI center medical director who shall be a cardiologist or interventional cardiologist - \$359,000 annually X one level I STEMI center = \$359,000 X 3 years = \$1,077,000 for the first 3 year period and \$359,000 annually X one level I STEMI center X 1 year = \$359,000 annually thereafter.
  - 6) STEMI program manager/coordinator who is a registered nurse or a qualified individual - \$126,046 annually X one level I STEMI center = \$126,046 X 3 years = \$378,138 for the first 3 year period and \$126,046 annually X one level I STEMI center X 1 year = \$126,046 annually thereafter.
  - 7) Physician to direct cardiac rehabilitation services trained in cardiac rehabilitation - \$200,339 annually X one level I STEMI center = \$200,339 X 3 years = \$601,017 for the first 3 year period and \$200,339 annually X one level I STEMI center X 1 year = \$200,339 annually thereafter.
  - 8) Cardiologist - \$359,000 annually X one level I STEMI center = \$359,000 X 3 years = \$1,077,000 for the first 3 year period and \$359,000 X one level I STEMI center X 1 year = \$359,000 annually thereafter.
  - 9) Cardiothoracic surgeon - \$403,993 annually X one level I STEMI center = \$403,993 X 3 years = \$1,211,979 for the first 3 year period and \$403,993 annually X one level I STEMI center X 1 year = \$403,993 annually thereafter.
  - 10) An internal medicine physician - \$181,823 annually X one level I STEMI center = \$181,823 X 3 years = \$545,469 for the first 3 year period and \$181,823 annually X one level I STEMI center X 1 year = \$181,823 annually thereafter.
  - 11) A diagnostic radiologist - \$402,539 annually X one level I STEMI center = \$402,539 X 3 years = \$1,207,617 for the first 3 year period and \$402,539 annually X one level I STEMI center X 1 year = \$402,539 annually thereafter.
  - 12) An anesthesiologist - \$331,932 annually X one level I STEMI center for the first 3 year period = \$331,932 X 3 years = \$995,796 for the

- first 3 year period and \$331,932 annually X one level I STEMI center X 1 year = \$331,932 annually thereafter.
- 13) Anesthesiology resident - \$61,000 annually X one level I STEMI center = \$61,000 X 3 years = \$183,000 for the first 3 year period and \$61,000 annually X one level I STEMI center X 1 year = \$61,000 annually thereafter.
  - 14) Certified nurse anesthetists - \$155,095 annually X one level I STEMI center = \$155,095 X 3 years = \$465,285 for the first year 3 year period and \$155,095 annually X one level I STEMI center X 1 year = \$155,095 annually thereafter.
  - 15) Anesthesia assistants - \$120,000 annually X one level I STEMI center = \$120,000 X 3 years = \$360,000 for the first 3 year period and \$120,000 X one level I STEMI center X 1 year = \$120,000 annually thereafter.
  - 16) Emergency department physician credentialed for STEMI care by the STEMI center 24 hours a day, 7 days a week - \$244,973 annually X 3 emergency department physicians X one level I STEMI center = \$734,919 X 3 years = \$2,204,757 for the first 3 year period and \$244,973 annually X 3 physicians X one level I STEMI center X 1 year = \$734,919 annually thereafter.
  - 17) Registered nurses in the emergency department - \$64,533 annually X 5 registered nurses in the emergency department X one level I STEMI center = \$322,665 X 3 years = \$967,995 for the first 3 year period and \$322,665 X one level I STEMI center X 1 year = \$322,665 annually thereafter.
  - 18) Medical director of the emergency department - \$199,038 annually X one level I STEMI center = \$199,038 X 3 years = \$597,114 for the first 3 year period and \$199,038 X one level I STEMI center X 1 year = \$199,038 annually thereafter.
  - 19) A medical director for a designated intensive care unit - \$177,560 annually X one level I STEMI center = \$177,560 X 3 years = \$532,680 for the first 3 year period and \$177,560 annually X one level I STEMI center X 1 year = \$177,560 annually thereafter.
  - 20) A physician on duty or available 24 hours a day 7 days a week in the designated intensive care unit - \$244,553 annually X 3 STEMI center intensive care unit physicians X one level I STEMI center = \$733,659 X 3 years = \$2,200,977 for the first 3 year period and \$244,553 annually X 3 STEMI center intensive care unit physicians = \$733,659 annually X one level I STEMI center X 1 year = \$733,659 annually thereafter.
  - 21) The designated intensive care unit shall have a 1 to 1 or 1 to 2 registered nurse/patient ratio used for critically ill patients requiring intensive care unit level of care - \$67,623 annually X 5 registered nurses in the designated intensive care unit X one level I STEMI center = \$338,115 X 3 years = \$1,014,345 for the first 3 year period and \$67,623 X 5 registered nurses = \$338,115 annually X one level I STEMI center X 1 year = \$338,115 annually thereafter.
  - 22) Intermediate care unit medical director - \$177,560 annually X one level I STEMI center = \$177,560 X 3 years = \$532,680 for the first 3

- year period and \$177,560 annually X one level I STEMI center X 1 year = \$177,560 annually thereafter.
- 23) Physician on duty or available 24 hours a day, 7 days a week in the intermediate care unit - \$177,560 annually X 3 physicians in the intermediate unit X one level I STEMI center = \$532,680 X 3 years = \$1,598,040 for the first 3 year period and \$177,560 annually X 3 physicians = \$532,680 annually X one level I STEMI center X 1 year = \$532,680 annually thereafter.
- 24) The intermediate care unit shall have registered nurses and other essential personnel on duty 24 hours a day 7 days a week - \$65,097 annually for the registered nurse X 4 registered nurses in the intermediate care unit X one level I STEMI center = \$260,388 X 3 years = \$781,164 for the first 3 year period and \$65,097 X 4 registered nurses = \$260,338 annually X one level I STEMI center X 1 year = \$260,388 annually thereafter.
- 25) Certified Nursing Technician - \$30,000 annually X one level I STEMI center = \$30,000 X 3 years = \$90,000 for the first 3 year period and \$30,000 annually X one level I STEMI center X 1 year = \$30,000 annually thereafter.
- 26) The STEMI center post-anesthesia recovery room shall have registered nurses and other essential personnel on call and available within 60 minutes 24 hours a day 7 days a week - \$65,097 annually X 4 registered nurses X one level I STEMI center = \$260,388 X 3 years = \$781,164 for the first 3 year period and \$65,097 X 4 registered nurses = \$260,388 annually X one level I STEMI center X 1 year = \$260,388 annually thereafter.
- 27) Computerized tomography technician - \$58,895 annually X 4 computerized tomography technicians X one level I STEMI center = \$235,580 X 3 years = \$706,740 for the first 3 year period and \$58,895 X 4 computerized tomography technicians = \$235,580 X one level I STEMI center X 1 year = \$235,580 annually thereafter.
- 28) Radiologist - average \$300,000 annually X 3 neurologist/radiologists X one level I STEMI center = \$900,000 X 3 years = \$2,700,000 for the first 3 year period and \$300,000 X 3 neurologists/radiologists = \$900,000 annually X one level I STEMI center X 1 year = \$900,000 annually thereafter.
- 29) Transport nurse - average \$62,000 annually X one level I STEMI center = \$62,000 X 4 transport nurses = \$248,000 X 3 years = \$744,000 for the first 3 year period and \$62,000 annually X 4 transport nurses X one level I STEMI center X 1 year = \$248,000 annually thereafter.
- 30) Radiology technician - average \$62,000 annually X 4 radiology technicians X one level I STEMI center = \$248,000 X 3 years = \$744,000 for the first 3 year period and \$62,000 annually X 4 radiology technicians X one level I STEMI center X 1 year = \$248,000 annually thereafter.
- 31) Scrub nurse - \$68,655 annually X 4 scrub nurses X one level I STEMI center = \$274,620 X 3 years = \$823,860 for the first 3 year period and \$68,655 X 4 scrub nurses = \$274,620 annually X one level I STEMI center X 1 year = \$274,620 annually thereafter.

- 32) Clinical perfusionist - \$111,420 annually X one level I STEMI center = \$111,420 X 3 years = \$334,260 for the first 3 year period and \$111,420 annually X one level I STEMI center X 1 year = \$111,420 annually thereafter.
- 33) Nurse educator/supervisor to ensure staff are trained on core competencies - \$78,500 annually X one level I STEMI center = \$78,500 X 3 years = \$235,500 for the first 3 year period and \$78,500 annually X one level I STEMI center X 1 year = \$78,500 annually thereafter.

Total cost for salaries for medical professionals for the first 3 year period - \$1,077,000 (#1 above) + \$378,138 (#2 above) + \$1,077,000 (#3 above) + \$179,250 (#4 above) + \$1,077,000 (#5 above) + \$378,138 (#6 above) + \$601,017 (#7 above) + \$1,077,000 (#8 above) + \$1,211,979 (#9 above) + \$545,469 (#10 above) + \$1,207,617 (#11 above) + \$995,796 (#12 above) + \$183,000 (#13 above) + \$465,285 (#14 above) + \$360,000 (#15 above) + \$2,204,757 (#16 above) + \$967,995 (#17 above) + \$597,114 (#18 above) + \$532,680 (#19 above) + \$2,200,977 (#20 above) + \$1,014,345 (#21 above) + \$532,680 (#22 above) + \$1,598,040 (#23 above) + \$781,164 (#24 above) + \$90,000 (#25 above) + \$781,164 (#26 above) + \$706,740 (#27 above) + \$2,700,000 (#28 above) + \$744,000 (#29 above) + \$744,000 (#30 above) + \$823,860 (#31 above) + \$334,260 (#32 above) + \$235,500 (#33 above) = \$28,402,965 for the first 3 year period.

Total cost for the salaries for the medical professionals for annually thereafter - \$359,000 (#1 above) + \$126,046 (#2 above) + \$359,000 (#3 above) + \$59,750 (#4 above) + \$359,000 (#5 above) + \$126,046 (#6 above) + \$200,339 (#7 above) + \$359,000 (#8 above) + \$403,993 (#9 above) + \$181,823 (#10 above) + \$402,539 (#11 above) + \$331,932 (#12 above) + \$61,000 (#13 above) + \$155,095 (#14 above) + \$120,000 (#15 above) + \$734,919 (#16 above) + \$322,665 (#17 above) + \$199,038 (#18 above) + \$177,560 (#19 above) + \$733,659 (#20 above) + \$338,115 (#21 above) + \$177,560 (#22 above) + \$532,680 (#23 above) + \$260,388 (#24 above) + \$30,000 (#25 above) + \$260,388 (#26 above) + \$235,580 (#27 above) + \$900,000 (#28 above) + \$248,000 (#29 above) + \$248,000 (#30 above) + \$274,620 (#31 above) + \$111,420 (#32 above) + \$78,500 (#33 above) = \$9,467,655 for annually thereafter.

**B. Continuing education costs for level I STEMI center staff.**

- 1) Level I core team members of the STEMI call roster shall complete a minimum of 10 hours of continuing education in the area of acute coronary syndrome every year – average of \$10.00 per hour for online training X 10 hours = \$100 X one level I STEMI center = \$100 X 3 years = \$300 for the first 3 year period and \$100 X one level I STEMI center X 1 year = \$100 annually thereafter.
- 2) Level I core team member of the STEMI call roster shall complete a minimum of 10 hours of continuing education in the area of acute

- coronary syndrome every year - average of \$39.99 annually for online training -  $\$39.99 \times \text{one level I STEMI center} = \$39.99 \times 3 \text{ years} = \$119.97$  for the first 3 year period and  $\$39.99 \times \text{one level I STEMI center} \times 1 \text{ year} = \$39.99$  annually thereafter.
- 3) Level I STEMI call roster member (emergency department physician) shall complete a minimum average of 10 hours of continuing education in cardiovascular disease every year - average of \$10.00 per hour for online training  $\times 10 \text{ hours} \times \text{one level I STEMI center} = \$100 \times 3 \text{ years} = \$300$  for the first 3 year period and  $\$100 \times \text{one level I STEMI center} \times 1 \text{ year} = \$100$  annually thereafter.
  - 4) Level I STEMI call roster member (interventional cardiologist) shall complete a minimum average of 10 hours of continuing education in the area of cardiovascular disease every year - average of \$10.00 per hour for online training  $\times 10 \text{ hours} \times \text{one level I STEMI center} = \$100 \times 3 \text{ years} = \$300$  for the first 3 year period and  $\$100 \times \text{one level I STEMI center} \times 1 \text{ year} = \$100$  annually thereafter.
  - 5) Level I STEMI call roster member (others as appropriate) shall complete a minimum average of 10 hours of continuing education in the area of cardiovascular disease every year - average of \$10.00 per hour for online training  $\times 10 \text{ hours} \times \text{one level I STEMI center} = \$100$  annually  $\times 3 \text{ others as appropriate} = \$300 \times 3 \text{ years} = \$900$  for the first 3 year period and  $\$300 \times \text{one level I STEMI center} \times 1 \text{ year} = \$300$  annually thereafter.
  - 6) A level I STEMI center medical director shall complete a minimum of 10 hours of continuing medical education every year in the area of acute coronary syndrome - average of \$10.00 per hour for online training  $\times 10 \text{ hours} \times \text{one level I STEMI center} = \$100 \times 3 \text{ years} = \$300$  for the first 3 year period and  $\$100 \times \text{one level I STEMI center} \times 1 \text{ year} = \$100$  annually thereafter.
  - 7) A level I program coordinator/ manager shall complete a minimum of 10 hours of continuing education every year in the area of cardiovascular disease - average of \$39.99 annually for online training =  $\$39.99 \times \text{one level I STEMI center} = \$39.99 \times 3 \text{ years} = \$119.97$  for the first 3 year period and  $\$39.99 \times \text{one level I STEMI center} \times 1 \text{ year} = \$39.99$  annually thereafter.
  - 8) Emergency department physicians in level I STEMI centers shall complete a minimum average of 4 hours of continuing medical education in cardiovascular disease every year - average of \$10.00 per hour for online training  $\times 3 \text{ physicians in the emergency room} \times 4 \text{ hours} \times \text{one level I STEMI center} = \$120 \times 3 \text{ years} = \$360$  for the first 3 year period and  $\$10.00 \times 3 \text{ physicians} \times 4 \text{ hours} \times \text{one level I STEMI center} \times 1 \text{ year} = \$120$  annually thereafter.
  - 9) Registered nurses assigned to the emergency departments in level I STEMI centers shall complete a minimum of 4 hours of continuing education in the area of cardiovascular disease every year - average of \$39.99 annually for online training =  $\$39.99 \times 5 \text{ registered nurses in the emergency room} \times \text{one level I STEMI center} \times 3 \text{ years} = \$599.85$  for the first 3 year period and  $\$39.99 \times 5 \text{ registered nurses in the emergency room} \times \text{one level I STEMI center} \times 1 \text{ year} = \$199.95$  annually thereafter.

- 10) Registered nurses assigned to the intensive care unit in level I STEMI centers who care for STEMI patients shall complete a minimum of 8 hours of continuing education in the area of cardiovascular disease every year - average of \$39.99 annually for online training X 5 registered nurses in the intensive care unit X one level I STEMI center X 3 years = \$599.85 for the first 3 year period and \$39.99 annually X 5 registered nurses in the intensive care unit X one level I STEMI center X 1 year = \$199.95 annually thereafter.
- 11) Registered nurses and clinical staff assigned to the cardiac catheterization laboratory shall complete a minimum of eight hours of continuing education every year in the area of acute coronary syndrome - average of \$39.99 annually for online training X 5 staff in the catheterization laboratory X one level I STEMI center X 3 years = \$599.85 for the first 3 year period and \$39.99 annually X 5 staff in the catheterization laboratory X one level I STEMI center X 1 year = \$199.95 annually thereafter.
- 12) Registered nurses assigned to the intermediate care unit in level I STEMI centers shall complete a minimum of 8 hours of continuing education in the area of cardiovascular disease every year - average of \$39.99 annually X 4 intermediate unit registered nurses X one level I STEMI center X 3 years = \$479.88 for the first 3 year period and \$39.99 X 4 registered nurses X one level I STEMI center X 1 year = \$159.96 annually thereafter.

Total cost for continuing education for level I STEMI center staff for the first 3 year period - \$300 (#1 above) + \$119.97 (#2 above) + \$300 (#3 above) + \$300 (#4 above) + \$900 (#5 above) + \$300 (#6 above) + \$119.97 (#7 above) + \$360 (#8 above) + \$599.85 (#9 above) + \$599.85 (#10 above) + \$599.85 (#11 above) + \$479.88 (#12 above) = \$4,979.37 for the first 3 year period.

Total cost for continuing education for level I STEMI center staff for annually thereafter - \$100 (#1 above) + \$39.99 (#2 above) + \$100 (#3 above) + \$100 (#4 above) + \$300 (#5 above) + \$100 (#6 above) + \$39.99 (#7 above) + \$120 (#8 above) + \$199.95 (#9 above) + \$199.95 (#10 above) + \$199.95 (#11 above) + \$159.96 (#12 above) = \$1659.79 for annually thereafter.

### C. Medical Equipment.

- 1) Electronic communication devices for STEMI/ cardiac catheterization lab team members - 2 electronic communication devices (cell phone and beeper) X \$300 for the annual cost of each electronic communication device X 2 STEMI/cardiac catheterization lab team members carrying this device ( one member on call and one back-up member) X one level I STEMI center X 3 years = \$3,600 for the first 3 year period and 2 electronic communication devices (cell phone and beeper) X \$300 for the annual cost of each electronic communication device X 2 STEMI call roster members ( one member on call and one back-up member) carrying

this device X one level I STEMI center X 1 year = \$1,200 annually thereafter.

2) Resuscitation equipment for the emergency department-

- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level I STEMI center = \$600 X 3 years = \$1,800 for the first 3 year period and at least 2 X \$300 each = \$600 X one level I STEMI center X 1 year = \$600 annually thereafter.
- b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period and \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 1 year = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period and \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 1 year = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 for the first year for one level I STEMI center + \$150 per year X 2 years for upkeep and maintenance of air outlets for one level I STEMI center = \$300 for a total of \$790 for air outlets for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X 3 years for one level I STEMI center = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X 3 years for one level I STEMI center = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1050 X 3 years for one level I STEMI center = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X 3 years for one level I STEMI center = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 3 years for one level I STEMI center = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X 3 years for one level I STEMI center = \$600 for the first 3 year period) for a total of \$73,990 for the first 3 year period and (air outlet upkeep and maintenance \$150 X one level I STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 15 X one level I STEMI center X 1 year = \$525) + (nasal cannula \$.40 X 500 patients X one level I STEMI center X 1 year = \$200) + (masks \$2.40 X 500 X one level I STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 X one level I STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 X one level I STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 X one level I STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients X one level I STEMI center X 1 year = \$200) for a total of \$25,075 annually thereafter.
- e) Mechanical ventilator - \$7000 X one level I STEMI center = \$7000 for the first year and \$1,500 for the annual upkeep and maintenance in the future of one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for 2 years for a total of \$10,000 for the first 3 year period and \$1,500 for the upkeep and maintenance



- for one level I STEMI center X 1 year = \$1,500 annually thereafter.
- f) Suction devices - suction device canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I STEMI center = \$25,000 X 3 years = \$75,000 for the first 3 year period and \$50 X 500 patients X one level I STEMI center X 1 year = \$25,000 annually thereafter.
  - g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 for the cost of the first year and \$1,500 for the annual upkeep and maintenance of one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for upkeep and maintenance X one level I STEMI center X 1 year = \$1,500 annually thereafter.
  - h) Central line insertion equipment - \$600 X 300 patients = \$180,000 X one level I STEMI center = \$180,000 X 3 years = \$540,000 for the first 3 year period and \$600 X 300 patients = \$180,000 X one level I STEMI center X 1 year = \$180,000 annually thereafter.
  - i) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 = \$2,000) = \$6,000 X one level I STEMI center = \$6,000 X 3 years = \$18,000 for the first 3 year period and \$6,000 X one level I STEMI center X 1 year = \$6,000 annually thereafter.
  - j) Intraosseous devices -needles \$25 each X 300 patients = \$7,500 X one level I STEMI center = \$7,500 X 3 years = \$22,500 for the first 3 year period and \$25 each X 300 patients = \$7,500 X one level I STEMI center X 1 year = \$7,500 annually thereafter.
  - k) Drugs necessary for STEMI emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level I STEMI center = \$50,000 X 3 years = \$150,000 for the first 3 year period and \$100 X 500 = \$50,000 X one level I STEMI center X 1 year = \$50,000 annually thereafter.
  - l) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level I STEMI center X 1 year = \$25,000 annually thereafter.
  - m) Two-way communication link with emergency medical service vehicles / equipment necessary to communicate with emergency medical services regarding pre-hospital ECG STEMI findings - \$1,200 apiece X one level I STEMI center = \$1,200 for the first year + \$200 for upkeep and maintenance for one level I STEMI center X 2 years (years 2 through 3) = \$400 for a total of \$1,600 for the first 3 year period and \$200 for upkeep and maintenance for one level I STEMI center X 1 year = \$200 annually thereafter.
  - n) End-tidal carbon dioxide monitor - \$3,900 X one level I STEMI center = \$3,900 for the first year and \$1,500 for the annual upkeep

and maintenance for one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$6,900 for the first 3 year period and \$1,500 for the annual upkeep and maintenance for one level I STEMI center X one level I STEMI center X 1 year = \$1,500 annually thereafter.

- o) Temperature control devices for patient and resuscitation fluids - \$270 pack of 10 (Bair Hugger Therapy) X 30 = \$8,100 X one level I STEMI center X 3 years = \$24,300 for the first 3 year period and \$270 pack of 10 (Bair Hugger Therapy) X 30 = \$8,100 X one level I STEMI center X 1 year = \$8,100 annually thereafter.
- p) External pacemaker - \$10 per set for pacer electrodes average cost (this will be used with the cardiac defibrillator already accounted for in g above) X 30 = \$300 X one level I STEMI center X 3 years = \$900 for the first 3 year period and \$10 per set X 30 = \$300 X one level I STEMI center X 1 year = \$300 annually thereafter.
- q) Transvenous pacemaker - \$200 average cost of pacer wires and equipment X 30 = \$6,000 X one level I STEMI center X 3 years = \$18,000 + generator cost \$7,000 X 5 generators = \$35,000 for the first year + \$1,000 X 2 years (years 2 through 3) for maintenance and upkeep of generators for a total of \$37,000 for the generators and a total of \$55,000 for the first 3 year period and \$200 average cost X 30 = \$6,000 + \$1,000 for the maintenance and upkeep of the generator = \$7,000 X one level I STEMI center X 1 year = \$7,000 annually thereafter.

Total cost for resuscitation equipment for one level I STEMI center for the emergency room department for the first 3 year period - \$1,800 (letter a above) + \$37,500 (letter b above) + \$37,500 (letter c above) + \$73,990 (letter d above) + \$10,000 (letter e above) + \$75,000 (letter f above) + \$40,895 (letter g above) + \$540,000 (letter h above) + \$18,000 (letter i above) + \$22,500 (letter j above) + \$150,000 (letter k above) + \$75,000 (letter l above) + \$1,600 (letter m above) + \$6,900 (letter n above) + \$24,300 (letter o above) + \$900 (letter p above) + \$55,000 (letter q above) = \$1,170,885 for the first 3 year period.

Total cost for resuscitation equipment for one level I STEMI center for the emergency room department for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,075 (letter d above) + \$1,500 (letter e above) + \$25,000 (letter f above) + \$1,500 (letter g above) + \$180,000 (letter h above) + \$6,000 (letter i above) + \$7,500 (letter j above) + \$50,000 (letter k above) + \$25,000 (letter l above) + \$200 (letter m above) + \$1,500 (letter n above) + \$8,100 (letter o above) + \$300 (letter p above) + \$7,000 (letter q above) = \$364,275 for annually thereafter.

- 3) Resuscitation equipment for the intensive care unit -
  - a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes, bag-mask resuscitator, and a mechanical ventilator - (laryngoscopes at least 2 X \$300 each =

\$600 X 3 years X one level I STEMI center = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 packs = \$12,500 X 3 years X one level I STEMI center = \$37,500 for the first 3 year period) + (bag-mask resuscitator \$250 for a pack of 10 X 50 packs X 3 years X one level I STEMI center = \$37,500 for the first 3 year period) + (mechanical ventilator \$7000 X one level I STEMI center X 1 year (the first year) + \$1,500 for the upkeep and maintenance of ventilator X 2 years (years 2 through 3) X one level I STEMI center = \$3,000 for a total of \$10,000 for the first 3 year period) = for a total of \$86,800 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level I STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 1 year = \$12,500) + (bag-mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 1 year = \$12,500) + (mechanical ventilator \$1,500 for upkeep and maintenance X one level I STEMI center X 1 year = \$1500) = \$1,500 for a total of \$27,100 annually thereafter.

- b) Oxygen source with concentration controls - (air outlet \$70 X 7 = \$490 X one level I STEMI center X 1 year (the first year) = \$490 + \$150 for upkeep and maintenance of air outlets X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator \$35 X 25 = \$875 X 3 years X one level I STEMI center = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 = \$200 X 3 years X one level I STEMI center = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X 3 years X one level I STEMI center = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X 3 years X one level I STEMI center = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X 3 years X one level I STEMI center = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 3 years X one level I STEMI center = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X 3 years X one level I STEMI center = \$600 for the first 3 year period) for a total of \$76,615 for the first 3 year period and (air outlet upkeep and maintenance = \$150 X one level I STEMI center X 1 year = \$150 + (regulator \$35 X 25 = \$875 X one level I STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 = \$200 X one level I STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) for a total of \$25,425 annually thereafter.
- c) Cardiac emergency cart, including medications - \$1600 cart + medications and suction devices \$1000 = \$2,600 X one level I STEMI center X 1 year (the first year) = \$2,600 + \$1,000

medications X 2 years (years 2 through 3) = \$2,000 for a total of \$4,600 for the first 3 year period and \$1,000 medications and suction devices X one level I STEMI center X 1 year = \$1,000 annually thereafter.

- d) Telemetry, electrocardiograph capability, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X 3 years X one level I STEMI center = \$1,200,000) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X 1 year (first year) X one level I STEMI center = \$37,895 + \$1,500 X 2 years (years 2 through 3) X one level I STEMI center = \$3,000 for a total of \$40,895) for a total of \$1,240,895 for the first 3 year period and (telemetry \$800 X 500 patients = \$400,000 X one level I STEMI center X 1 year = \$400,000) + (\$1,500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level I STEMI center X 1 year = \$1,500) for a total of \$401,500 for one level I STEMI center annually thereafter.
- e) Electronic pressure monitoring and pulse oximetry - (electronic pressure monitoring devices \$100 X 25 = \$2,500 X 3 years X one level I STEMI center = \$7,500) + (pulse oximetry devices \$100 X 25 = \$2,500 X 3 years X one level I STEMI center = \$7,500) for a total of \$15,000 for the first 3 year period and electronic pressure monitoring devices \$100 X 25 X one level I STEMI center X 1 year = \$2,500 + pulse oximetry devices \$100 X 25 X one level I STEMI center X 1 year = \$2,500 for a total of \$5,000 annually thereafter.
- f) End-tidal carbon dioxide monitor - \$3,900 X one level I STEMI center X 1 year (first year) = \$3,900 for the first year + \$1,500 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$6,900 for the first 3 year period and \$1,500 X one level I STEMI center X 1 year = \$1,500 annually thereafter.
- g) Patient weight devices - \$1000 X one level I STEMI center X 1 year (the first year) + \$250 annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$500 for a total of \$1,500 for the first 3 year period and \$250 X one level I STEMI center X 1 year = \$250 annually thereafter.
- h) Drugs, intravenous fluids and supplies - (drugs are already accounted for in letter c above) (all standard intravenous fluids \$4.00 each X 500 patients = \$2,000 X 3 years X one level I STEMI center = \$6,000) + (all standard administration devices \$4.00 each X 500 patients = \$2,000 X 3 years X one level I STEMI center = \$6,000) + (all standard intravenous catheters \$4.00 each X 500 patients = \$2,000 X 3 years X one level I STEMI center = \$6,000) for a total of \$18,000 for the first 3 year period and (all standard intravenous fluids \$4.00 each X 500 patients X one level I STEMI center X 1 year = \$2,000) + (all standard administration devices \$4.00 each X 500 patients X one level I STEMI center X 1 year = \$2,000) + (all standard intravenous catheters \$4.00 each X 500 patients X one level I STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.

- i) External pacemaker - \$10 per set for pacer electrodes average cost (this will be used with the cardiac defibrillator already accounted for in d above) X 30 = \$300 X one level I STEMI center X 3 years = \$900 for the first 3 year period and \$10 per set X 30 = \$300 X one level I STEMI center X 1 year = \$300 annually thereafter.
- j) Transvenous pacemaker - \$200 average cost of pacer wires and equipment X 30 = \$6,000 X one level I STEMI center X 3 years = \$18,000 + generator cost \$7,000 X 5 generators = \$35,000 for the first year + \$1,000 X 2 years (years 2 through 3) for maintenance and upkeep of generators for a total of \$37,000 for the generators and a total of \$55,000 for the first 3 year period and \$200 average cost X 30 = \$6,000 + \$1,000 for the maintenance and upkeep of the generator = \$7,000 X one level I STEMI center X 1 year = \$7,000 annually thereafter.

Total cost for resuscitation equipment for one level I STEMI center for the intensive care unit for the first 3 year period - \$86,800 (letter a above) + \$76,615 (letter b above) + \$4,600 (letter c above) + \$1,240,895 (letter d above) + \$15,000 (letter e above) + \$6,900 (letter f above) + \$1,500 (letter g above) + \$18,000 (letter h above) + \$900 (letter i above) + \$55,000 (letter j above) = \$1,506,210 for the first 3 year period.

Total cost for resuscitation equipment for one level I STEMI center for the intensive care unit for annually thereafter - \$27,100 (letter a above) + \$25,425 (letter b above) + \$1,000 (letter c above) + \$401,500 (letter d above) + \$5,000 (letter e above) + \$1,500 (letter f above) + \$250 (letter g above) + \$6,000 (letter h above) + \$300 (letter i above) + \$7,000 (letter j above) = \$475,075 annually thereafter.

- 4) Cardiac Catheterization lab diagnostic and interventional equipment-
  - a) Sheaths - \$2,000 average cost X 500 = \$1,000,000 X one level I STEMI center X 3 years = \$3,000,000 for the first 3 year period and \$2,000 X 500 patients = \$1,000,000 X one level I STEMI center X 1 year = \$1,000,000 annually thereafter.
  - b) Diagnostic wires - \$200 average cost X 250 = \$50,000 X one level I STEMI center X 3 years = \$150,000 for the first 3 year period and \$200 X 250 = \$50,000 X one level I STEMI center X 1 year = \$50,000 annually thereafter.
  - c) Diagnostic catheters - \$200 average cost X 250 = \$50,000 X one level I STEMI center X 3 years = \$150,000 for the first 3 year period and \$200 X 250 = \$50,000 X one level I STEMI center X 1 year = \$50,000 annually thereafter.
  - d) Manifold or contrast injector/delivery system - \$200 average cost X 250 = \$50,000 X one level I STEMI center X 3 years = \$150,000 for the first 3 year period and \$200 X 250 = \$50,000 X one level I STEMI center X 1 year = \$50,000 annually thereafter.

- e) Pressure tubing - \$125.00 average cost for 96 inches of pressure tubing X 250 = \$31,250 X one level I STEMI center X 3 years = \$93,750 for the first 3 year period and \$125.00 average cost for 96 inches X 250 = \$31,250 X one level I STEMI center X 1 year = \$31,250 annually thereafter.
- f) Interventional guide wires - \$350 X 250 = \$87,500 X one level I STEMI center X 3 years = \$262,500 for the first 3 year period and \$350 X 250 = \$87,500 X one level I STEMI center X 1 year = \$87,500 annually thereafter.
- g) Interventional guide catheters - \$26 X 250 = \$6,500 X one level I STEMI center X 3 years = \$19,500 for the first 3 year period and \$26 X 250 = \$6,500 X one level I STEMI center X 1 year = \$6,500 annually thereafter.
- h) Balloon catheters (compliant and non-compliant) - \$500 X 250 = \$125,000 X one level I STEMI center X 3 years = \$375,000 for the first 3 year period and \$500 X 250 = \$125,000 X one level I STEMI center X 1 year = \$125,000 annually thereafter.
- i) Stents (bare metal stents and drug eluting stents) – (bare metal stent \$1,000 X 100 = \$100,000) + (drug eluting stents \$2,500 X 150 = \$375,000) for a total of \$475,000 X one level I STEMI center X 3 years = \$1,425,000 for the first 3 year period and (bare metal stent \$1,000 X 100 = \$100,000) + (drug eluting stents \$2,500 X 150 = \$375,000) for a total of \$475,000 X one level I STEMI center X 1 year = \$475,000 annually thereafter.
- j) Balloon pump catheters - \$500 X 250 = \$125,000 X one level I STEMI center X 3 years = \$375,000 for the first 3 year period and \$500 X 250 = \$125,000 X one level I STEMI center X 1 year = \$125,000 annually thereafter.
- k) Thrombectomy aspiration catheters/mechanical thrombectomy device - \$600 X 250 = \$150,000 X one level I STEMI center X 3 years = \$450,000 for the first 3 year period and \$600 X 250 = \$150,000 X one level I STEMI center X 1 year = \$150,000 annually thereafter.
- l) Balloon pump - (\$73,000 X 1 machine X one level I STEMI center X 1 year = \$73,000 for the first year) + (\$3,000 for upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$6,000) = for a total of \$79,000 for the first 3 year period and \$3000 for upkeep and maintenance X one level I STEMI center X 1 year = \$3,000 annually thereafter.
- m) Left ventricular assistive device - \$70,000 X 25 = \$1,750,000 X one level I STEMI center X 3 years = \$5,250,000 for the first 3 year period and \$70,000 X 25 = \$1,750,000 X one level I STEMI center X 1 year = \$1,750,000 annually thereafter.
- n) Embolic protection device - \$4,000 X 50 = \$200,000 X one level I STEMI center X 3 years = \$600,000 for the first 3 year period and \$200,000 X one level I STEMI center X 1 year = \$200,000 annually thereafter.

**Total cost for one level I STEMI center for cardiac catheterization lab diagnostic and interventional equipment for the first 3 year**

period - \$3,000,000 (letter a above) + \$150,000 (letter b above) + \$150,000 (letter c above) + \$150,000 (letter d above) + \$93,750 (letter e above) + \$262,500 (letter f above) + \$19,500 (letter g above) + \$375,000 (letter h above) + \$1,425,000 (letter i above) + \$375,000 (letter j above) + \$450,000 (letter k above) + \$79,000 (letter l above) + \$5,250,000 (letter m above) + \$600,000 (letter n above) = \$12,379,750 for the first 3 year period.

Total cost for one level I STEMI center for the cardiac catheterization lab diagnostic and interventional equipment for annually thereafter - \$1,000,000 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$50,000 (letter d above) + \$31,250 (letter e above) + \$87,500 (letter f above) + \$6,500 (letter g above) + \$125,000 (letter h above) + \$475,000 (letter i above) + \$125,000 (letter j above) + \$150,000 (letter k above) + \$3,000 (letter l above) + \$1,750,000 (letter m above) + \$200,000 (letter n above) = \$4,103,250 for annually thereafter.

**5) Cardiac catheterization lab resuscitation equipment-**

- a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes - (laryngoscopes at least 2 X \$300 each = \$600 X one level I STEMI center X 3 years = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period) + (mechanical ventilator \$7000 X one level I STEMI center X 1 year (the first year) + \$1,500 for annual upkeep and maintenance of ventilator X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$10,000) for a total of \$49,300 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level I STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 1 year = \$12,500) + (mechanical ventilator \$1,500 annual upkeep and maintenance X one level I STEMI center X 1 year = \$1,500) for a total of \$14,600 annually thereafter.
- b) Bag-mask resuscitator and sources of oxygen - (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period) + (air outlet \$70 X 7 = \$490 X one level I STEMI center X 1 year (the first year) + \$150 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level I STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 3 years = \$63,000 for

the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$114,115 for the first 3 year period and (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 1 year = \$12,500) + (air outlet \$150 for annual upkeep and maintenance X one level I STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level I STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) for a total of \$37,925 annually thereafter.

- c) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level I STEMI center X 1 year = \$25,000 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X one level I STEMI center X 3 years = \$1,200,000 for the first 3 year period) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X one level I STEMI center X 1 year (the first year) + \$1,500 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period) for a total of \$1,240,895 for the first 3 year period and (telemetry \$800 X 500 patients = \$400,000 X one level I STEMI center X 1 year = \$400,000) + (\$1,500 for annual upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level I STEMI center X 1 year = \$1,500) for a total of \$401,500 annually thereafter.
- e) All standard intravenous fluids and administration devices and intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) for a total of \$18,000 for the first 3 year period (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) + (\$4.00 each for



standard intravenous catheters X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.

- f) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 100 patients = \$10,000 X one level I STEMI center X 3 years = \$30,000 for the first 3 year period and \$10,000 X one level I STEMI center X 1 year = \$10,000 annually thereafter.
- g) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level I STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level I STEMI center for the cardiac catheterization lab for the first 3 year period - \$49,300 (letter a above) + \$114,115 (letter b above) + \$75,000 (letter c above) + \$1,240,895 (letter d above) + \$18,000 (letter e above) + \$30,000 (letter f above) + \$75,000 (letter g above) = \$1,602,310 for the first 3 year period.

Total cost for resuscitation equipment for the cardiac catheterization lab for one level I STEMI center for annually thereafter - \$14,600 (letter a above) + \$37,925 (letter b above) + \$25,000 (letter c above) + \$401,500 (letter d above) + \$6,000 (letter e above) + \$10,000 (letter f above) + \$25,000 (letter g above) = \$520,025 for annually thereafter.

- 6) Resuscitation equipment for the intermediate care unit –
  - a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes - (laryngoscopes at least 2 X \$300 each = \$600 X one level I STEMI center X 3 years = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period) + (mechanical ventilator \$7000 X one level I STEMI center X 1 year (the first year) + \$1,500 for annual upkeep and maintenance of ventilator X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$10,000) for a total of \$49,300 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level I STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 1 year = \$12,500) + (mechanical ventilator \$1,500 annual upkeep and maintenance X one level I STEMI center X 1 year = \$1,500) for a total of \$14,600 annually thereafter.
  - b) Bag-mask resuscitator and sources of oxygen - (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year

period) + (air outlet \$70 X 7 = \$490 X one level I STEMI center X 1 year (the first year) + \$150 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level I STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$114,115 for the first 3 year period and (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 1 year = \$12,500) + (air outlet \$150 for annual upkeep and maintenance X one level I STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level I STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) for a total of \$37,925 annually thereafter.

- c) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level I STEMI center X 1 year = \$25,000 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X one level I STEMI center X 3 years = \$1,200,000 for the first 3 year period) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X one level I STEMI center X 1 year (the first year) + \$1,500 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period) for a total of \$1,240,895 for the first 3 year period and (telemetry \$800 X 500 patients = \$400,000 X one level I STEMI center X 1 year = \$400,000) + (\$1,500 for annual upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one

level I STEMI center X 1 year = \$1,500) for a total of \$401,500 annually thereafter.

- e) All standard intravenous fluids and administration devices and intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) for a total of \$18,000 for the first 3 year period (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- f) Drugs and supplies necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 100 patients = \$10,000 X one level I STEMI center X 3 years = \$30,000 for the first 3 year period and \$10,000 X one level I STEMI center X 1 year = \$10,000 annually thereafter.
- g) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level I STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level I STEMI center for the intermediate care unit for the first 3 year period - \$49,300 (letter a above) + \$114,115 (letter b above) + \$75,000 (letter c above) + \$1,240,895 (letter d above) + \$18,000 (letter e above) + \$30,000 (letter f above) + \$75,000 (letter g above) = \$1,602,310 for the first 3 year period.

Total cost for resuscitation equipment for one level I STEMI center for the intermediate care unit for annually thereafter - \$14,600 (letter a above) + \$37,925 (letter b above) + \$25,000 (letter c above) + \$401,500 (letter d above) + \$6,000 (letter e above) + \$10,000 (letter f above) + \$25,000 (letter g above) = \$520,025 for annually thereafter.

- 7) Resuscitation equipment for the radiology department -
  - a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level I STEMI center X 3 years = \$1,800 for the first 3 year period and at least 2 X \$300 each = \$600 X one level I STEMI center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 =

- \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period and \$250 for a pack of 10 X 50 X one level I STEMI center X 1 year = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period and \$250 for a pack of 10 X 50 packs X one level I STEMI center X 1 year = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level I STEMI center X 1 year (the first year) = \$490 for the first year + \$150 annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level I STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$76,615 for the first 3 year period and (air outlet \$70 X 7 = \$490 X one level I STEMI center X 1 year = \$490) + (regulator for air outlet \$35 X 25 = \$875 X one level I STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) for a total of \$25,765 for annually thereafter.
- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$50 X 500 X one level I STEMI center X 1 year = \$25,000 annually thereafter.
- f) Telemetry- average of \$800 X 500 patients = \$400,000 X one level I STEMI center X 3 years = \$1,200,000 for the first 3 year period and \$800 X 500 patients X one level I STEMI center X 1 year = \$400,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level I STEMI center = \$37,895 X one level I STEMI center X 1 year (first year) = \$37,895 for the first year + \$1,500 for the

- annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for the annual upkeep and maintenance X one level I STEMI center X 1 year = \$1,500 for annually thereafter.
- h) All standard administration devices - \$4.00 each X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period and \$2,000 X one level I STEMI center X 1 year = \$2,000 annually thereafter.
  - i) All standard intravenous catheters - \$4.00 each X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period and \$2,000 X one level I STEMI center X 1 year = \$2,000 annually thereafter.
  - j) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level I STEMI center X 3 years = \$150,000 for the first 3 year period and \$50,000 X one level I STEMI center X 1 year = \$50,000 annually thereafter.
  - k) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level I STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level I STEMI center for the radiology department for the first 3 year period - \$1,800 (letter a above) + \$37,500 (letter b above) + \$37,500 (letter c above) + \$76,615 (letter d above) + \$75,000 (letter e above) + \$1,200,000 (letter f above) + \$40,895 (letter g above) + \$6,000 (letter h above) + \$6,000 (letter i above) + \$150,000 (letter j above) + \$75,000 (letter k above) = \$1,706,310 for the first three year period.

Total cost for resuscitation equipment for one level I STEMI center for the radiology department for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,765 (letter d above) + \$25,000 (letter e above) + \$400,000 (letter f above) + \$1,500 (letter g above) + \$2,000 (letter h above) + \$2,000 (letter i above) + \$50,000 (letter j above) + \$25,000 (letter k above) = \$556,865 for annually thereafter.

- 8) Monitoring equipment to fully support the STEMI patient during the time the patient is physically present in the radiology department and during transportation to and from the radiology department - (\$1,800 each X 8 machines = \$14,400 X one level I STEMI center X 1 year (the first year) = \$14,400) + (\$150 for upkeep and maintenance X 8 machines X 2 years (years 2 through 3) X one level I STEMI center = \$2,400) for a total of \$16,800 for the first 3 year period and \$150 X 8 machines X 1 year X one level I STEMI Center = \$1,200 annually thereafter.

- 9) X-ray capability - ( $\$150,000 \times 1 \text{ machine} = \$150,000 \times \text{one level I STEMI center} \times 1 \text{ year (the first year)} = \$150,000$ ) + ( $\$500 \text{ for upkeep and maintenance} \times 1 \text{ machine} \times 2 \text{ years (years 2 through 3)} \times \text{one level I STEMI center} = \$1,000$ ) for a total of  $\$151,000$  for the first 3 year period and  $\$500 \text{ for upkeep and maintenance} \times 1 \text{ machine} \times 1 \text{ year} \times \text{one level I STEMI center} = \$500$  annually thereafter.
- 10) In-house computerized tomography -  $\$1,000,000$  average for CT machine =  $\$1,000,000 \times \text{one level I STEMI center} \times 1 \text{ year (the first year)} = \$1,000,000$  for the first year +  $\$200,000$  for annual upkeep and maintenance  $\times \text{one level I STEMI center} \times 2 \text{ years (years 2 through 3)} = \$400,000$  for a total of  $\$1,400,000$  for the first 3 year period and  $\$200,000$  for annual upkeep and maintenance  $\times \text{one level I STEMI center} \times 1 \text{ year} = \$200,000$  annually thereafter.
- 11) Angiography with interventional capability for cardiac catheterization lab – average of  $\$1,000,000 \times \text{one level I STEMI center} \times 1 \text{ year (the first year)} = \$1,000,000$  for the first year +  $\$200,000$  for annual upkeep and maintenance  $\times \text{one level I STEMI center} \times 2 \text{ years (years 2 through 3)} = \$400,000$  for a total of  $\$1,400,000$  for the first 3 year period and  $\$200,000$  for annual upkeep and maintenance  $\times \text{one level I STEMI center} \times 1 \text{ year} = \$200,000$  annually thereafter.
- 12) Operating rooms shall have at least the following equipment:
- a) Thermal control equipment for patient and resuscitation fluids - ( $\text{temperature control devices } \$2,750 \text{ each} \times 2 \text{ devices} = \$5,500 \times \text{one level I STEMI center} \times 1 \text{ year (the first year)} \text{ for a total of } \$5,500 \text{ for the first year} + \$2,750 \times 1 \text{ device} = \$2,750 \text{ for replacement} \times 2 \text{ years (years 2 through 3)} \times \text{one level I STEMI center} = \$5,500 \text{ for a total of } \$11,000 \text{ for the first 3 year period}$ ) + ( $\text{blankets } \$270 \text{ pack of } 10 \times 50 = \$13,500 \times \text{one level I STEMI center} \times 3 \text{ years} = \$40,500 \text{ for the first 3 year period}$ ) + ( $\text{resuscitation fluids } \$50 \times 500 \text{ patients} = \$25,000 \times \text{one level I STEMI center} \times 3 \text{ years} = \$75,000 \text{ for the first 3 year period}$ ) for a total of  $\$126,500$  for the first 3 year period and ( $\text{temperature control devices } \$2,750 \text{ each} \times 1 \text{ device} \times 1 \text{ year} = \$2,750 \text{ for replacement} \times \text{one level I STEMI center} = \$2,750$ ) + ( $\text{blankets } \$270 \text{ pack of } 10 \times 50 = \$13,500 \times \text{one level I STEMI center} \times 1 \text{ year} = \$13,500$ ) + ( $\text{resuscitation fluids } \$50 \times 500 \text{ patients} = \$25,000 \times \text{one level I STEMI center} \times 1 \text{ year} = \$25,000$ ) for a total of  $\$41,250$  for annually thereafter.
  - b) X-ray capability - ( $\$150,000 \times \text{one machine} = \$150,000 \times \text{one level I STEMI center} \times 1 \text{ year (the first year)} = \$150,000$ ) + ( $\$500 \text{ for upkeep and maintenance} \times 1 \text{ machine} \times 2 \text{ years (years 2 through 3)} \times \text{one level I STEMI center} = \$1,000$ ) for a total of  $\$151,000$  for the first 3 year period and  $\$500 \text{ for upkeep and maintenance} \times 1 \text{ machine} \times 1 \text{ year} \times \text{one level I STEMI center} = \$500$  annually thereafter.

- c) Instruments and equipment necessary for cardiothoracic surgery capability – estimate of \$3,000 X one level I STEMI center X 3 years = \$9,000 for the first 3 year period and \$3,000 X one level I STEMI center X 1 year = \$3,000 annually thereafter.
- d) Patient Monitoring equipment - \$10,000 X 5 machines X one level I STEMI center X 1 year (the first year) = \$50,000 for the first year + \$500 for annual upkeep and maintenance X 5 machines X one level I STEMI center X 2 years (years 2 through 3) = \$5,000 for a total of \$55,000 for the first 3 year period and \$500 for annual upkeep and maintenance X 5 machines X one level I STEMI center X 1 year = \$2,500 annually thereafter.

Total cost for operating room equipment for one level I STEMI center for the first 3 year period- \$126,500 (letter a above) + \$151,000 (letter b above) + \$9,000 (letter c above) + \$55,000 (letter d above) = \$341,500 for the first three year period.

Total for operating room equipment for annually thereafter- \$41,250 (letter a above) + \$500 (letter b above) + \$3,000 (letter c above) + \$2,500 (letter d above) = \$47,250 annually thereafter.

**13) Resuscitation equipment available to the operating room.**

- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level I STEMI center X 3 years = \$1,800 for the first 3 year period and \$600 X one level I STEMI center X 1 year = \$600 annually thereafter.
- b) Endotracheal tubes of all sizes - 250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period and \$12,500 X one level I STEMI center X 1 year = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period and \$12,500 X one level I STEMI center X 1 year = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7= \$490 X one level I STEMI center X 1 year (the first year) = \$490 for the first year + air outlet annual upkeep and maintenance \$150 X one level I STEMI center X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level I STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 3 years = \$63,000



for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$76,615 for the first 3 year period and (air outlet annual upkeep and maintenance \$150 X one level I STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level I STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) for a total of \$25,425 annually thereafter.

- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level I STEMI center X 1 year = \$25,000 annually thereafter.
- f) Telemetry - average of \$800 X 500 patients = \$400,000 X one level I STEMI center X 3 years = \$1,200,000 for the first 3 year period and \$400,000 X one level I STEMI center X 1 year = \$400,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level I STEMI center X 1 year (the first year) = \$37,895 + \$1,500 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for the annual upkeep and maintenance X one level I STEMI center X 1 year = \$1,500 annually thereafter.
- h) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) for a total of \$18,000 for the first 3 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.



- i) Drugs necessary for emergency care- e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate -  $\$100 \times 500$  patients =  $\$50,000 \times$  one level I STEMI center  $\times 3$  years =  $\$150,000$  for the first 3 year period and  $\$100 \times 500$  patients  $\times$  one level I STEMI center  $\times 1$  year =  $\$50,000$  annually thereafter.
- j) Supplies necessary for emergency care (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) -  $\$50 \times 500$  patients =  $\$25,000 \times$  one level I STEMI center  $\times 3$  years =  $\$75,000$  for the first 3 year period and  $\$50 \times 500$  patients =  $\$25,000 \times$  one level I STEMI center  $\times 1$  year =  $\$25,000$  annually thereafter.

Total cost for resuscitation equipment for one level I STEMI center for the operating room for the first 3 year period -  $\$1,800$  (letter a above) +  $\$37,500$  (letter b above) +  $\$37,500$  (letter c above) +  $\$76,615$  (letter d above) +  $\$75,000$  (letter e above) +  $\$1,200,000$  (letter f above) +  $\$40,895$  (letter g above) +  $\$18,000$  (letter h above) +  $\$150,000$  (letter i above) +  $\$75,000$  (letter j above) =  $\$1,712,310$  for the first 3 year period.

Total cost for resuscitation equipment for one level I STEMI center for the operating room for annually thereafter -  $\$600$  (letter a above) +  $\$12,500$  (letter b above) +  $\$12,500$  (letter c above) +  $\$25,425$  (letter d above) +  $\$25,000$  (letter e above) +  $\$400,000$  (letter f above) +  $\$1,500$  (letter g above) +  $\$6,000$  (letter h above) +  $\$50,000$  (letter i above) +  $\$25,000$  (letter j above) =  $\$558,525$  for annually thereafter.

**14) Resuscitation equipment for the Post-Anesthesia Recovery room (PAR) -**

- a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes, bag-mask resuscitator, sources of oxygen and a mechanical ventilator - (laryngoscopes at least  $2 \times \$300$  each =  $\$600 \times$  one level I STEMI center  $\times 3$  years =  $\$1,800$  for the first 3 year period) + (endotracheal tubes of all sizes  $\$250$  for a pack of  $10 \times 50 = \$12,500 \times$  one level I STEMI center  $\times 3$  years =  $\$37,500$  for the first 3 year period) + (bag-mask resuscitator  $\$250$  for a pack of  $10 \times 50 = \$12,500 \times$  one level I STEMI center  $\times 3$  years =  $\$37,500$  for the first 3 year period) + (mechanical ventilator  $\$7000 \times$  one level I STEMI center  $\times 1$  year (the first year) =  $\$7,000$  +  $\$1,500$  for annual upkeep and maintenance  $\times$  one level I STEMI center  $\times 2$  years (years 2 through 3) =  $\$3,000$  for a total of  $\$10,000$  for the first 3 year period) + (air outlet  $\$70 \times 7 = \$490 \times$  one level I STEMI center  $\times 1$  year (the first year) =  $\$490$  +  $\$150$  for annual upkeep and maintenance  $\times 2$  years (years 2 through 3) =  $\$300$  for a total of  $\$790$  for the first 3 year period) + (regulator  $\$35 \times 25 = \$875 \times$  one level I STEMI center  $\times 3$  years =  $\$2,625$  for the first 3 year period) + (nasal cannula  $\$.40 \times 500$  patients =  $\$200 \times$  one level I STEMI center  $\times 3$  years =  $\$600$  for the first 3 year period) +

(masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 patients = \$1,050 X one level I STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$163,415 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level I STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 1 year = \$12,500) + (bag-mask resuscitator \$250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 1 year = \$12,500) + (mechanical ventilator \$1,500 for annual upkeep and maintenance X one level I STEMI center X 1 year = \$1,500) + (air outlet \$150 for annual upkeep and maintenance X one level I STEMI center X 1 year = \$150) + (regulator \$35 X 25 = \$875 X one level I STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 patients = \$1,050 X one level I STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) for a total of \$55,525 annually thereafter.

- b) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$50 X 500 patients X one level I STEMI center X 1 year = \$25,000 annually thereafter.
- c) Telemetry, electrocardiograph capability, cardiac monitor and defibrillator - (telemetry average \$800 X 500 patients = \$400,000 X one level I STEMI center X 3 years = \$1,200,000 for the first 3 year period) + (electrocardiograph, cardiac monitor and defibrillator \$37,895 X one level I STEMI center X 1 year (the first year) = \$37,895 for the first year + \$1,500 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for electrocardiograph, cardiac monitor and defibrillator) for a total of \$1,240,895 for the first 3 year period and \$1,500 for annual upkeep and maintenance X one level I STEMI center X 1 year = \$1,500 + telemetry average \$800 X 500 patients = \$400,000 X one level I STEMI center X 1 year = \$400,000 for a total of \$401,500 annually thereafter.
- d) All standard intravenous fluids and administration devices, including intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I STEMI

- center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard administration devices X 500 patients X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) for a total of \$18,000 for the first 3 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients X one level I STEMI center X 1 year = \$2,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- e) Drugs and supplies necessary for emergency care - saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level I STEMI center X 3 years = \$150,000 for the first 3 year period and \$50,000 X one level I STEMI center X 1 year = \$50,000 annually thereafter.
- f) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) - \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$50 X 500 patients = \$25,000 X one level I STEMI center X 1 year = \$25,000 annually thereafter.

**Total cost for resuscitation equipment for one level I STEMI center for the post-anesthesia recovery room (PAR) for the first 3 year period - \$163,415 (letter a above) + \$75,000 (letter b above) + \$1,240,895 (letter c above) + \$18,000 (letter d above) + \$150,000 (letter e above) + \$75,000 (letter f above) = \$1,722,310 for the first 3 year period.**

**Total cost for resuscitation equipment for one level I STEMI center for the post-anesthesia recovery room (PAR) for annually thereafter - \$55,525 (letter a above) + \$25,000 (letter b above) + \$401,500 (letter c above) + \$6,000 (letter d above) + \$50,000 (letter e above) + \$25,000 (letter f above) = \$563,025 for annually thereafter.**

#### **15) Laboratory Services-**

- a) Standard analyses of blood, urine and other body fluids - costs of materials \$200 X 500 patients = \$100,000 X one level I STEMI center X 3 years = \$300,000 for the first 3 year period and \$200 X 500 patients X one level I STEMI center X 1 year = \$100,000 annually thereafter.
- b) Blood typing and cross matching - centrifuge \$2000 X one level I STEMI center X 1 year (the first year) = \$2,000 + \$250 for the annual upkeep and maintenance of the centrifuge X one level I STEMI center X 2 years (years 2 through 3) = \$500 for a total of \$2,500 for the first 3 year period and \$250 for the annual upkeep

and maintenance of the centrifuge X one level I STEMI center X 1 year = \$250 annually thereafter.

- c) Coagulation studies - \$200 materials X 250 patients = \$50,000 X one level I STEMI center X 3 years = \$150,000 for the first 3 year period and \$200 materials X 250 patients = \$50,000 X one level I STEMI center X 1 year = \$50,000 annually thereafter.
- d) Blood bank or access to a community central blood bank and adequate hospital blood storage facilities - at the least blood storage refrigerators 1 large refrigerator / use of community central blood bank at \$15,000 X one level I STEMI center X 1 year (the first year) = \$15,000 + \$1,500 for the annual upkeep and maintenance of the blood storage refrigerator X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$18,000 for the first 3 year period and \$1,500 for the annual upkeep and maintenance of the blood storage refrigerator X one level I STEMI center X 1 year = \$1,500 annually thereafter.
- e) Blood gases and pH determinations- at least 1 blood gas analyzer and kit \$3000 X one level I STEMI center X 3 years = \$9,000 for the first 3 year period and \$3,000 X one level I STEMI center X 1 year = \$3,000 annually thereafter.
- f) Blood chemistries - test and kits average of \$350 X 100 patients = \$35,000 X one level I STEMI center X 3 years = \$105,000 for the first 3 year period and \$350 X 100 patients X one level I STEMI center X 1 year = \$35,000 for annually thereafter.

Total cost for laboratory services for one level I STEMI center for the first 3 year period - \$300,000 (letter a above) + \$ 2,500 (letter b above) + \$150,000 (letter c above) + \$18,000 (letter d above) + \$9,000 (letter e above) + \$105,000 (letter f above) = \$584,500 for the first 3 year period.

Total cost for laboratory services for one level I STEMI center for annually thereafter - \$100,000 (letter a above) + \$250 (letter b above) + \$50,000 (letter c above) + \$1,500 (letter d above) + \$3,000 (letter e above) + \$35,000 (letter f above) = \$189,750 annually thereafter.

Total cost for medical equipment for one level I STEMI center for the first 3 year period - \$3,600 (number 1 above) + \$1,170,885 (number 2 above) + \$1,506,210 (number 3 above) + \$12,379,750 (number 4 above) + \$1,602,310 (number 5 above) + \$1,602,310 (number 6 above) + \$1,706,310 (number 7 above) + \$16,800 (number 8 above) + \$151,000 (number 9 above) + \$1,400,000 (number 10 above) + \$1,400,000 (number 11 above) + \$341,500 (number 12 above) + \$1,712,310 (number 13 above) + \$1,722,310 (number 14 above) + \$584,500 (number 15 above) = \$27,299,795 for the first 3 year period.

Total cost for medical equipment for one level I STEMI center for annually thereafter - \$1,200 (number 1 above) + \$364,275 (number 2 above) + \$475,075 (number 3 above) + \$4,103,250 (number 4 above) + \$520,025

(number 5 above) + \$520,025 (number 6 above) + \$556,865 (number 7 above) + \$1,200 (number 8 above) + \$500 (number 9 above) + \$200,000 (number 10 above) + \$200,000 (number 11 above) + \$47,250 (number 12 above) + \$558,525 (number 13 above) + \$563,025 (number 14 above) + \$189,750 (number 15 above) = \$8,300,965 for annually thereafter.

- D. The STEMI center shall have support services to assist the patient's family from time of entry into the facility to time of discharge - at least 1 full time equivalent medical social worker \$66,000 annually X one level I STEMI center X 3 years = \$198,000 for the first 3 year period and \$66,000 X one level I STEMI center X 1 year = \$66,000 annually thereafter.
- E. The STEMI center shall have cardiac rehabilitation or a written network agreement for the provision of cardiac rehabilitation - at least 2 registered nurses X \$67,623 annually X one level I STEMI center X 3 years = \$405,738 for the first 3 year period and \$67,623 X 2 registered nurses X one level I STEMI center X 1 year = \$135,246 annually thereafter.
- F. Courses/conferences every 2 years focused on cardiovascular disease for program manager.
- 1) National or international STEMI course or conference - (\$1200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level I STEMI center X 3 years = \$0 for the first 3 year period and \$2,950 X no level I STEMI center X 1 year = \$0 annually thereafter.
  - 2) Regional STEMI course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level I STEMI center X 3 years = \$5,250 for the first 3 year period and \$1,750 X one level I STEMI center X 1 year = \$1,750 annually thereafter.
  - 3) State STEMI course or conference - (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level I STEMI center X 3 years = \$0 for the first 3 year period and \$1,150 X no level I STEMI center X 1 year = \$0 annually thereafter.
- G. STEMI registry.
- 1) Computer with internet capability/access \$600 computer + internet fee \$100/month \$1,200 annually X one level I STEMI center X 3 years = \$5,400 for the first 3 year period and \$1,800 X one level I STEMI center X 1 year = \$1,800 annually thereafter.
  - 2) Patient registrar - \$36,258 annually X one level I STEMI center X 3 years = \$108,774 for the first 3 year period and \$36,258 X one level I STEMI center X 1 year = \$36,258 annually thereafter.

- 3) Training to set up STEMI registry system/program for data entry - \$200 annually X one level I STEMI center X 3 years = \$600 for the first 3 year period and \$200 X one level I STEMI center X 1 year = \$200 annually thereafter.
- H. Public education program to promote STEMI prevention and awareness of signs and symptoms- e.g. community health fairs costs of printing and advertisement costs (posters, brochures etc...) \$350 for each health fair x 12 health fairs annually = \$4,200 annually X one level I STEMI center X 3 years = \$12,600 for the first 3 year period and \$4,200 X one level I STEMI center X 1 year = \$4,200 annually thereafter.
- I. Patient education program to promote STEMI prevention and STEMI symptoms awareness - printing costs of brochures etc... \$500 annually X one level I STEMI center X 3 years = \$1,500 for the first 3 year period and \$500 X one level I STEMI center X 1 year = \$500 annually thereafter.
- J. Professional education outreach program in catchment areas to provide training and other supports to improve care of STEMI patients - e.g. hospitals sponsor at least 1 conference per year within their service area at the cost of \$2000 annually X one level I STEMI center X 3 years = \$6,000 for the first 3 year period and \$2,000 X one level I STEMI center X 1 year = \$2,000 annually thereafter.
- K. STEMI centers shall be actively involved in local and regional EMS systems by providing training and clinical educational resources - hospitals sponsor at least 1 conference per year within their area for EMS at the cost of \$2,000 annually X one level I STEMI center X 3 years = \$6,000 for the first 3 year period and \$2,000 X one level I STEMI center X 1 year = \$2,000 annually thereafter.
- L. Report of findings presented at regional, state or national meetings – (\$500 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,550 X one level I STEMI center X 3 years = \$4,650 for the first 3 year period and \$1,550 X one level I STEMI center X 1 year = \$1,550 annually thereafter.
- M. A lighted designated helicopter landing area at the STEMI center to accommodate incoming medical helicopters which shall be cordoned off at all times from the general public. The STEMI center shall also have a landing area on the hospital premises no more than 3 minutes from the emergency room - (construction of helipad estimate of \$36,000 X 1 helipad X one level I STEMI center X 1 year (the first year) = \$36,000) + (maintenance and upkeep of helipad \$2,000 X 2 years (years 2 through 3) X one level I STEMI center = \$4,000) for a total of \$40,000 for the first 3 year period for the helipad + (cordoning barrier \$4,300 X 1 year (the first year) X one level I STEMI center = \$4,300) + \$500 for maintenance and upkeep of the cordoning barrier X 2 years (years 2 through 3) X one level I STEMI center = \$1,000) for a total of \$5,300 for the first 3 year

period for the cordoning barrier for a total of \$45,300 for the first 3 year period and \$2,000 for maintenance and upkeep of helipad + \$500 for maintenance and upkeep of the cordoning barrier = \$2,500 X 1 year X one level I STEMI center = \$2,500 annually thereafter.

Final numbers for one level I STEMI center for the first 3 year period - [\$28,402,965 letter A] + [\$4,979.37 letter B] + [\$27,299,795 letter C] + [\$198,000 letter D] + [\$405,738 letter E] + [\$5,250 letter F] + [\$114,774 letter G] + [\$12,600 letter H] + [\$1,500 letter I] + [\$6,000 letter J] + [\$6,000 letter K] + [\$4,650 letter L] + [\$45,300 letter M] = \$56,507,551 for the first 3 year period.

Final numbers for one level I STEMI center for annually thereafter - [\$9,467,655 letter A] + [\$1,659.79 letter B] + [8,300,965 letter C] + [\$66,000 letter D] + [\$135,246 letter E] + [\$1,750 letter F] + [\$38,258 letter G] + [\$4,200 letter H] + [\$500 letter I] + [\$2,000 letter J] + [\$2,000 letter K] + [\$1,550 letter L] + [\$2,500 letter M] = \$18,024,283 for annually thereafter.

It is expected that one level I STEMI center will be designated during the first 3 year period (\$56,507,551) and that same level I STEMI center will be designated again at some time (3 year intervals) annually thereafter (\$18,024,283).

## 2. Level II STEMI centers.

### A. Salary costs for medical professionals.

- 1) A physician experienced in diagnosing and treating cardiovascular disease - \$359,000 annually X one level II STEMI center = \$359,000 X 3 years = \$1,077,000 for the first 3 year period and \$359,000 annually X one level II STEMI center X 1 year = \$359,000 annually thereafter.
- 2) At least 1 other health care professional or qualified individual credentialed in STEMI care - \$126,046 annually X one level II STEMI center = \$126,046 X 3 years = \$378,138 for the first 3 year period and \$126,046 annually X one level II STEMI center X 1 year = \$126,046 annually thereafter.
- 3) Interventional Cardiologist - \$359,000 annually X one level II STEMI center for the first 3 year period = \$359,000 X 3 years = \$1,077,000 for the first 3 year period and \$359,000 X one level II STEMI center X 1 year = \$359,000 annually thereafter.
- 4) Other health care professional as deemed necessary in the cardiac catheterization laboratory - \$59,750 annually X one level II STEMI center = \$59,750 X 3 years = \$179,250 for the first 3 year period and \$59,750 annually X one level II STEMI center X 1 year = \$59,750 annually thereafter.
- 5) STEMI center medical director who shall be a cardiologist or interventional cardiologist - \$359,000 annually X one level II STEMI center = \$359,000 X 3 years = \$1,077,000 for the first 3 year period

- and \$359,000 annually X one level II STEMI center X 1 year = \$359,000 annually thereafter.
- 6) STEMI program manager/coordinator who is a registered nurse or a qualified individual - \$126,046 annually X one level II STEMI center = \$126,046 X 3 years = \$378,138 for the first 3 year period and \$126,046 annually X one level II STEMI center X 1 year = \$126,046 annually thereafter.
  - 7) Physician to direct cardiac rehabilitation services trained in cardiac rehabilitation - \$200,339 annually X one level II STEMI center = \$200,339 X 3 years = \$601,017 for the first 3 year period and \$200,339 annually X one level II STEMI center X 1 year = \$200,339 annually thereafter.
  - 8) Cardiologist - \$359,000 annually X one level II STEMI center = \$359,000 X 3 years = \$1,077,000 for the first 3 year period and \$359,000 X one level II STEMI center X 1 year = \$359,000 annually thereafter.
  - 9) Cardiothoracic surgeon - \$403,993 annually X one level II STEMI center = \$403,993 X 3 years = \$1,211,979 for the first 3 year period and \$403,993 annually X one level II STEMI center X 1 year = \$403,993 annually thereafter.
  - 10) An internal medicine physician - \$181,823 annually X one level II STEMI center = \$181,823 X 3 years = \$545,469 for the first 3 year period and \$181,823 annually X one level II STEMI center X 1 year = \$181,823 annually thereafter.
  - 11) A diagnostic radiologist - \$402,539 annually X one level II STEMI center = \$402,539 X 3 years = \$1,207,617 for the first 3 year period and \$402,539 annually X one level II STEMI center X 1 year = \$402,539 annually thereafter.
  - 12) An anesthesiologist - \$331,932 annually X one level II STEMI center for the first 3 year period = \$331,932 X 3 years = \$995,796 for the first 3 year period and \$331,932 annually X one level II STEMI center X 1 year = \$331,932 annually thereafter.
  - 13) Anesthesiology resident- \$61,000 annually X one level II STEMI center = \$61,000 X three years = \$183,000 for the first 3 year period and \$61,000 annually X one level II STEMI center X 1 year = \$61,000 annually thereafter.
  - 14) Certified nurse anesthetists - \$155,095 annually X one level II STEMI center = \$155,095 X three years = \$465,285 for the first 3 year period and \$155,095 annually X one level II STEMI center X 1 year = \$155,095 annually thereafter.
  - 15) Anesthesia assistants - \$120,000 annually X one level II STEMI center = \$120,000 X 3 years = \$360,000 for the first 3 year period and \$120,000 X one level II STEMI center X 1 year = \$120,000 annually thereafter.
  - 16) Emergency department physician credentialed for STEMI care by the STEMI center 24 hours a day, 7 days a week - \$244,973 annually X 3 emergency department physicians X one level II STEMI center = \$734,919 X 3 years = \$2,204,757 for the first 3 year period and \$244,973 annually X 3 physicians X one level II STEMI center X 1 year = \$734,919 annually thereafter.



- 17) Registered nurses in the emergency department - \$64,533 annually X 5 registered nurses in the emergency department = \$322,665 X one level II STEMI center = \$322,665 X 3 years = \$967,995 for the first 3 year period and \$322,665 X one level II STEMI center X 1 year = \$322,665 annually thereafter.
- 18) Medical director of the emergency department - \$199,038 annually X one level II STEMI center = \$199,038 X 3 years = \$597,114 for the first 3 year period and \$199,038 X one level II STEMI center X 1 year = \$199,038 annually thereafter.
- 19) A medical director for a designated intensive care unit - \$177,560 annually X one level II STEMI center = \$177,560 X 3 years = \$532,680 for the first 3 year period and \$177,560 annually X one level II STEMI center X 1 year = \$177,560 annually thereafter.
- 20) A physician on duty or available 24 hours a day 7 days a week in the designated intensive care unit - \$244,553 annually X 3 STEMI center intensive care unit physicians X one level II STEMI center = \$733,659 X 3 years = \$2,200,977 for the first 3 year period and \$244,553 annually X 3 STEMI center intensive care unit physicians = \$733,659 annually X one level II STEMI center X 1 year = \$733,659 annually thereafter.
- 21) The designated intensive care unit shall have a 1 to 1 or 1 to 2 registered nurse/patient ratio used for critically ill patients requiring intensive care unit level of care - \$67,623 annually X 5 registered nurses in the designated intensive care unit = \$338,115 X one level II STEMI center = \$338,115 X 3 years = \$1,014,345 for the first 3 year period and \$67,623 X 5 registered nurses = \$338,115 annually X one level II STEMI centers X 1 year = \$338,115 annually thereafter.
- 22) Intermediate care unit medical director - \$177,560 annually X one level II STEMI center = \$177,560 X 3 years = \$532,680 for the first 3 year period and \$177,560 annually X one level II STEMI center X 1 year = \$177,560 annually thereafter.
- 23) Physician on duty or available 24 hours a day, 7 days a week in the intermediate care unit - \$177,560 annually X 3 physicians in the intermediate unit - \$532,680 X one level II STEMI center = \$532,680 X 3 years = \$1,598,040 for the first 3 year period and \$177,560 annually X 3 physicians = \$532,680 annually X one level II STEMI center X 1 year = \$532,680 annually thereafter.
- 24) The intermediate care unit shall have registered nurses and other essential personnel on duty 24 hours a day 7 days a week - \$65,097 annually for the registered nurse X 4 registered nurses in the intermediate care unit = \$260,388 X one level II STEMI center = \$260,388 X 3 years = \$781,164 for the first 3 year period and \$65,097 X 4 registered nurses = \$260,388 annually X one level II STEMI center X 1 year = \$260,388 annually thereafter.
- 25) Certified Nursing Technician - \$30,000 annually X one level II STEMI center = \$30,000 X 3 years = \$90,000 for the first 3 year period and \$30,000 annually X one level II STEMI center X 1 year = \$30,000 annually thereafter.
- 26) The STEMI center post-anesthesia recovery room shall have registered nurses and other essential personnel on call and available

- within 60 minutes 24 hours a day 7 days a week - \$65,097 annually X 4 registered nurses = \$260,388 X one level II STEMI center = \$260,388 X 3 years = \$781,164 for the first 3 year period and \$65,097 X 4 registered nurses = \$260,388 annually X one level II STEMI centers X 1 year = \$260,388 annually thereafter.
- 27) Computerized tomography technician - \$58,895 annually X 4 computerized tomography technicians = \$235,580 X one level II STEMI center = \$235,580 X 3 years = \$706,740 for the first 3 year period and \$58,895 X 4 computerized tomography technicians = \$235,580 X one level II STEMI center X 1 year = \$235,580 annually thereafter.
- 28) Radiologist - average \$300,000 annually X 3 neurologist/radiologists = \$900,000 X one level II STEMI center = \$900,000 X 3 years = \$2,700,000 for the first 3 year period and \$300,000 X 3 neurologists/radiologists = \$900,000 annually X one level II STEMI center X 1 year = \$900,000 annually thereafter.
- 29) Transport nurse - average \$62,000 annually X one level II STEMI center = \$62,000 X 4 transport nurses = \$248,000 X 3 years = \$744,000 for the first 3 year period and \$62,000 annually X 4 transport nurses X one level II STEMI centers X 1 year = \$248,000 annually thereafter.
- 30) Radiology technician - average \$62,000 annually X 4 radiology technicians = \$248,000 X one level II STEMI center = \$248,000 X 3 years = \$744,000 for the first 3 year period and \$62,000 annually X 4 radiology technicians X one level II STEMI center X 1 year = \$248,000 annually thereafter.
- 31) Scrub nurse - \$68,655 annually X 4 scrub nurses = \$274,620 X one level II STEMI center = \$274,620 X 3 years = \$823,860 for the first 3 year period and \$68,655 X 4 scrub nurses = \$274,620 annually X one level II STEMI center X 1 year = \$274,620 annually thereafter.
- 32) Clinical perfusionist - \$111,420 annually X one level II STEMI center = \$111,420 X 3 years = \$334,260 for the first 3 year period and \$111,420 annually X one level II STEMI center X 1 year = \$111,420 annually thereafter.
- 33) Nurse educator/supervisor to ensure staff are trained on core competencies - \$78,500 annually X one level II STEMI center = \$78,500 X 3 years = \$235,500 for the first 3 year period and \$78,500 annually X one level II STEMI center X 1 year = \$78,500 annually thereafter.

Total costs for salaries of medical professionals for one level II STEMI center for the first 3 year period - \$1,077,000 (#1 above) + \$378,138 (#2 above) + \$1,077,000 (#3 above) + \$179,250 (#4 above) + \$1,077,000 (#5 above) + \$378,138 (#6 above) + \$601,017 (#7 above) + \$1,077,000 (#8 above) + \$1,211,979 (#9 above) + \$545,469 (#10 above) + \$1,207,617 (#11 above) + \$995,796 (#12 above) + \$183,000 (#13 above) + \$465,285 (#14 above) + \$360,000 (#15 above) + \$2,204,757 (#16 above) + \$967,995 (#17 above) + \$597,114 (#18 above) + \$532,680 (#19 above) + \$2,200,977 (#20 above) + \$1,014,345 (#21 above) + \$532,680 (#22 above) + \$1,598,040 (#23 above) + \$781,164 (#24 above)

+ \$90,000 (# 25 above) + \$781,164 (#26 above) + \$706,740 (#27 above) + \$2,700,000 (#28 above) + \$744,000 (#29 above) + \$744,000 (#30 above) + \$823,860 (#31 above) + \$334,260 (#32 above) + \$235,500 (#33 above) = \$28,402,965 for the first 3 year period.

Total cost for salaries of medical professionals for annually thereafter - \$359,000 (#1 above) + \$126,046 (#2 above) + \$359,000 (#3 above) + \$59,750 (#4 above) + \$359,000 (#5 above) + \$126,046 (#6 above) + \$200,339 (#7 above) + \$359,000 (#8 above) + \$403,993 (#9 above) + \$181,823 (#10 above) + \$402,539 (#11 above) + \$331,932 (#12 above) + \$61,000 (#13 above) + \$155,095 (#14 above) + \$120,000 (#15 above) + \$734,919 (#16 above) + \$322,665 (#17 above) + \$199,038 (#18 above) + \$177,560 (#19 above) + \$733,659 (#20 above) + \$338,115 (#21 above) + \$177,560 (#22 above) + \$532,680 (#23 above) + \$260,388 (#24 above) + \$30,000 (# 25 above) + \$260,388 (#26 above) + \$235,580 (#27 above) + \$900,000 (#28 above) + \$248,000 (#29 above) + \$248,000 (#30 above) + \$274,620 (#31 above) + \$111,420 (#32 above) + \$78,500 (#33 above) = \$9,467,655 for annually thereafter.

**B. Continuing education costs for level II STEMI center staff.**

- 1.) Level II core team member of the STEMI call roster, usually the STEMI medical director, shall complete a minimum of 10 hours of continuing education in the area of acute coronary syndrome every year – average of \$10.00 per hour for online training X 10 hours = \$100 X one level II STEMI center X 3 years = \$300 for the first 3 year period and \$10.00 per hour X 10 hours X one level II STEMI center X 1 year = \$100 annually thereafter.
- 2.) Level II core team member of the STEMI call roster, usually the STEMI program manager/coordinator, shall complete a minimum of ten hours of continuing education in the area of acute coronary syndrome every year – average of \$39.99 annually for online training X one level II STEMI center X 3 years = \$119.97 for the first 3 year period and \$39.99 X one level II STEMI center X 1 year = \$39.99 annually thereafter.
- 3.) Level II STEMI call roster member (emergency department physician) shall complete minimum average of 10 hours of continuing education in the area of cardiovascular disease every year- average of \$10.00 per hour for online training X 10 hours X one level II STEMI center X 3 years = \$300 for the first 3 year period and \$10.00 per hour X 10 hours X one level II STEMI center X 1 year = \$100 annually thereafter.
- 4.) Level II STEMI call roster member (interventional cardiologist) shall complete minimum average of 10 hours of continuing education in the area of cardiovascular disease every year - average of \$10.00 per hour for online training X 10 hours X one level II STEMI center X 3 years = \$300 for the first 3 year period and \$10.00 X 10 hours X one level II STEMI center X 1 year = \$100 annually thereafter.

- 5.) Level II STEMI call roster members (others as appropriate) shall complete minimum average of 10 hours of continuing education in the area of cardiovascular disease every year - average of \$10.00 per hour for online training X 10 hours X one level II STEMI center X 3 years = \$300 annually X 3 others as appropriate = \$900 for the first 3 year period and \$10.00 per hour X 10 hours X one level II STEMI center X 1 year = \$100 X 3 others as appropriate = \$300 annually thereafter.
- 6.) A level II STEMI center medical director shall complete a minimum of 10 hours of continuing medical education every year in the area of acute coronary syndrome - average of \$10.00 per hour for online training X 10 hours X one level II STEMI center X 3 years = \$300 for the first 3 year period and \$10.00 X 10 hours X one level II STEMI center X 1 year = \$100 annually thereafter.
- 7.) A level II program manager/coordinator shall complete a minimum of 8 hours of continuing education every year in the area of cardiovascular disease - average of \$39.99 annually for online training = \$39.99 X one level II STEMI center X 3 years = \$119.97 for the first 3 year period and \$39.99 X one level II STEMI center X 1 year = \$39.99 annually thereafter.
- 8.) Emergency department physicians in level II STEMI centers shall complete a minimum average of 4 hours of continuing medical education in the area of cardiovascular disease every year - average of \$10.00 per hour for online training X 3 physicians in the emergency room X 4 hours X one level II STEMI center X 3 years = \$360 for the first 3 year period and \$10.00 X 3 physicians X 4 hours X one level II STEMI center X 1 year = \$120 annually thereafter.
- 9.) Registered nurses assigned to the emergency department in level II STEMI centers shall complete a minimum of 4 hours of continuing education in the area of cardiovascular disease every year - average of \$39.99 annually for online training = \$39.99 X 5 registered nurses in the emergency room X one level II STEMI center X 3 years = \$599.85 for the first 3 year period and \$39.99 X 5 registered nurses in the emergency room X one level II STEMI centers X 1 year = \$199.95 annually thereafter.
- 10.) Registered nurses assigned to the intensive care unit in level II STEMI centers who provide care to STEMI patients shall complete a minimum of 8 hours of continuing education in the area of cardiovascular disease every year - average of \$39.99 annually for online training X 4 registered nurses in the intensive care unit X one level II STEMI center X 3 years = \$479.88 for the first 3 year period and \$39.99 annually X 4 registered nurses in the intensive care unit X one level II STEMI center X 1 year = \$159.96 annually thereafter.
- 11.) Registered nurses and clinical staff assigned to the cardiac catheterization lab in level II STEMI centers shall complete a minimum of 8 hours of continuing education in the area of acute coronary syndrome every year - average of \$39.99 annually X 4 registered nurses and clinical staff assigned to the cardiac

catheterization lab X one level II STEMI center X 3 years = \$479.88 for the first 3 year period and \$39.99 X 4 registered nurses and clinical staff assigned to the cardiac catheterization lab X one level II STEMI center X 1 year = \$159.96 annually thereafter.

- 12.) Registered nurses assigned to the intermediate care unit in level II STEMI centers shall complete a minimum of 8 hours of continuing education in the area of cardiovascular disease every year – average of \$39.99 annually X 4 registered nurses assigned to the intermediate care unit X one level II STEMI center X 3 years = \$479.88 for the first 3 year period and \$39.99 X 4 registered nurses assigned to the intermediate care unit X one level II STEMI center X 1 year = \$159.96 annually thereafter.

Total cost for continuing education for medical staff of one level II STEMI center for the first 3 year period - \$300 (#1 above) + \$119.97 (#2 above) + \$300 (#3 above) + \$300 (#4 above) + \$900 (#5 above) + \$300 (#6 above) + \$119.97 (#7 above) + \$360 (#8 above) + \$599.85 (#9 above) + \$479.88 (#10 above) + \$479.88 (#11 above) + \$479.88 (#12 above) = \$4,739.43 for the first 3 year period.

Total cost for continuing education for medical staff of one level II STEMI center for annually thereafter - \$100 (#1 above) + \$39.99 (#2 above) + \$100 (#3 above) + \$100 (#4 above) + \$300 (#5 above) + \$100 (#6 above) + \$39.99 (#7 above) + \$120 (#8 above) + \$199.95 (#9 above) + \$159.96 (#10 above) + \$159.96 (#11 above) + \$159.96 (#12 above) = \$1,579.81 for annually thereafter.

### C. Medical Equipment.

- 1) Electronic communication devices for STEMI/cardiac catheterization lab team members - 2 electronic communication devices (cell phone and beeper/pager) X \$300 for the annual cost of each electronic communication device X 2 STEMI/cardiac catheterization lab team members carrying this device (1 member on call and 1 back-up member) X 3 years X one level II STEMI center = \$3,600 for the first 3 year period and 2 electronic communication devices (cell phone and beeper/pager) X \$300 for the annual cost of each electronic communication device X 2 STEMI/cardiac catheterization lab team members carrying this device (1 member on call and 1 back-up member) X one level II STEMI center X 1 year = \$1,200 annually thereafter.
- 2) Resuscitation equipment for the emergency department -
  - a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level II STEMI center = \$600 x 3 years = \$1,800 for the first 3 year period and at least 2 X \$300 each = \$600 X one level II STEMI center = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the

- first 3 year period and \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period and \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 for the first year X one level II STEMI center = \$490 + \$150 per year X 2 years (years 2 through 3) for upkeep and maintenance of air outlets X one level II STEMI center = \$300 for a total of \$790 for air outlets for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X 3 years X one level II STEMI center = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X 3 years X one level II STEMI center = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X 3 years X one level II STEMI center = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X 3 years X one level II STEMI center = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 3 years X one level II STEMI center = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X 3 years X one level II STEMI center = \$600 for the first 3 year period) for a total of \$73,990 for the first 3 year period and (air outlet upkeep and maintenance \$150 X one level II STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 15 X one level II STEMI center X 1 year = \$525) + (nasal cannula \$.40 X 500 patients X one level II STEMI center X 1 year = \$200) + (masks \$2.40 X 500 X one level II STEMI centers X 1 year = \$1,200) + (ambu bags \$10.50 X 100 X one level II STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 X one level II STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 X one level II STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients X one level II STEMI center X 1 year = \$200) for a total of \$25,075 annually thereafter.
- e) Mechanical ventilator - \$7000 X one level II STEMI center = \$7,000 for the first year and \$1,500 for the annual upkeep and maintenance in the future of one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for 2 years for a total of \$10,000 for the first 3 year period and \$1,500 for the upkeep and maintenance for one level II STEMI center X 1 year = \$1,500 annually thereafter.
- f) Suction devices - suction device canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II STEMI center = \$25,000 X 3 years = \$75,000 for the first 3 year period and \$50 X 500 patients X one level II STEMI center = \$25,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 for the cost of the first year X one level II STEMI center = \$37,895 + \$1,500 for the annual upkeep and maintenance of one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for upkeep and

- maintenance X one level II STEMI center X 1 year = \$1,500 annually thereafter.
- h) Central line insertion equipment - \$600 X 300 patients = \$180,000 X one level II STEMI center = \$180,000 X three years = \$540,000 for the first 3 year period and \$600 X 300 patients = \$180,000 X one level II STEMI center X one year = \$180,000 annually thereafter.
- i) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 = \$2,000) = \$6,000 X one level II STEMI center = \$6,000 X 3 years = \$18,000 for the first 3 year period and \$6,000 X one level II STEMI center X 1 year = \$6,000 annually thereafter.
- j) Intraosseous devices-needles - \$25 each X 300 patients = \$7,500 X one level II STEMI center = \$7,500 X 3 years = \$22,500 for the first 3 year period and \$25 each X 300 patients = \$7,500 X one level II STEMI center X 1 year = \$7,500 annually thereafter.
- k) Drugs necessary for STEMI emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 = \$50,000 X one level II STEMI center = \$50,000 X 3 years = \$150,000 for the first 3 year period and \$100 X 500 = \$50,000 X one level II STEMI center X 1 year = \$50,000 annually thereafter.
- l) Two-way communication link with emergency medical service vehicles/equipment necessary to communicate with emergency medical services regarding prehospital ECG STEMI findings - \$1,200 each X one level II STEMI center = \$1,200 for the first year + \$200 for upkeep and maintenance for one level II STEMI center X 2 years (years 2 through 3) = \$400 for a total of \$1,600 for the first 3 year period and \$200 for upkeep and maintenance X one level II STEMI center X 1 year = \$200 annually thereafter.
- m) End-tidal carbon dioxide monitor - \$3,900 X one level II STEMI center = \$3,900 for the first year and \$1,500 for the annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$6,900 for the first 3 year period and \$1,500 for the annual upkeep and maintenance X one level II STEMI center X 1 year = \$1,500 annually thereafter.
- n) Temperature control devices for patient and resuscitation fluids - \$270 pack of 10 (Bair Hugger Therapy) X 30 = \$8,100 X one level II STEMI center X 3 years = \$24,300 for the first 3 year period and \$270 pack of 10 (Bair Hugger Therapy) X 30 = \$8,100 X one level II STEMI center = \$8,100 annually thereafter.
- o) External pacemaker - \$10 per set for pacer electrodes average cost (this will be used with the cardiac defibrillator already accounted for in g above) X 30 = \$300 X one level II STEMI center X 3 years



= \$900 for the first 3 year period and \$10 per set X 30 = \$300 X one level II STEMI center X 1 year = \$300 annually thereafter.

- p) Transvenous pacemaker - \$200 average cost of pacer wires and equipment X 30 = \$6,000 X one level II STEMI center X 3 years = \$18,000 + generator cost \$7,000 X 5 generators = \$35,000 for the first year + \$1,000 X 2 years (years 2 through 3) for maintenance and upkeep of generators for a total of \$37,000 for the generators and a total of \$55,000 for the first 3 year period and \$200 average cost X 30 = \$6,000 + \$1,000 for the maintenance and upkeep of the generator = \$7,000 X one level II STEMI center X 1 year = \$7,000 annually thereafter.
- q) Supplies necessary for STEMI emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II STEMI center for the emergency room department for the first 3 year period - \$1,800 (letter a above) + \$37,500 (letter b above) + \$37,500 (letter c above) + \$73,990 (letter d above) + \$10,000 (letter e above) + \$75,000 (letter f above) + \$40,895 (letter g above) + \$540,000 (letter h above) + \$18,000 (letter i above) + \$22,500 (letter j above) + \$150,000 (letter k above) + \$1,600 (letter l above) + \$6,900 (letter m above) + \$24,300 (letter n above) + \$900 (letter o above) + \$55,000 (letter p above) + \$75,000 (letter q above) = \$1,170,885 for the first 3 year period.

Total cost for resuscitation equipment for one level II STEMI center for the emergency room department for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,075 (letter d above) + \$1,500 (letter e above) + \$25,000 (letter f above) + \$1,500 (letter g above) + \$180,000 (letter h above) + \$6,000 (letter i above) + \$7,500 (letter j above) + \$50,000 (letter k above) + \$200 (letter l above) + \$1,500 (letter m above) + \$8,100 (letter n above) + \$300 (letter o above) + \$7,000 (letter p above) + \$25,000 (letter q above) = \$364,275 for annually thereafter.

- 3) Resuscitation equipment for the intensive care unit -
- a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes, bag-mask resuscitator, and a mechanical ventilator - (laryngoscopes at least 2 X \$300 each = \$600 X 3 years X one level II STEMI center = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 packs = \$12,500 X 3 years X one level II STEMI center = \$37,500 for the first 3 year period) + (bag-mask resuscitator \$250 for a pack of 10 X 50 packs X 3 years X one level II STEMI center = \$37,500 for the first 3 year period) + (mechanical ventilator \$7000 X one level II STEMI center X 1 year (the first year) = \$7,000 + \$1,500 for the upkeep and maintenance of ventilator X 2



years (years 2 through 3) X one level II STEMI center = \$3,000 for a total of \$10,000 for the first 3 year period) for a total of \$86,800 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level II STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 1 year = \$12,500) + (bag-mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 1 year = \$12,500) + (mechanical ventilator \$1500 for upkeep and maintenance X one level II STEMI center X 1 year = \$1,500) for a total of \$27,100 annually thereafter.

- b) Oxygen source with concentration controls - (air outlet \$70 X 7 = \$490 X one level II STEMI center X 1 year (the first year) = \$490 + \$150 for upkeep and maintenance of air outlets X 2 years (years 2 through 3) X one level II STEMI center = \$300 for a total of \$790 for the first 3 year period) + (regulator \$35 X 25 = \$875 X 3 years X one level II STEMI center = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 = \$200 X 3 years X one level II STEMI center = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X 3 years X one level II STEMI center = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X 3 years X one level II STEMI center = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X 3 years X one level II STEMI center = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 3 years X one level II STEMI center = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X 3 years X one level II STEMI center = \$600 for the first 3 year period) for a total of \$76,615 for the first 3 year period and (air outlet upkeep and maintenance = \$150 X one level II STEMI center X 1 year = \$150) + (regulator \$35 X 25 = \$875 X one level II STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 = \$200 X one level II STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center = \$200) for a total of \$25,425 annually thereafter.
- c) Cardiac emergency cart, including medications - \$1600 cart + medications and suction devices \$1000 = \$2,600 X one level II STEMI center X 1 year (the first year) = \$2,600 + \$1,000 medications X 2 years (years 2 through 3) X one level II STEMI center = \$2,000 for a total of \$4,600 for the first 3 year period and \$1,000 medications and suction devices X one level II STEMI center X 1 year = \$1,000 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X 3 years X one level II STEMI center = \$1,200,000) + (electrocardiograph, cardiac

monitor and defibrillator = \$37,895 X 1 year (first year) X one level II STEMI center = \$37,895 + \$1,500 X 2 years (years 2 through 3) X one level II STEMI center = \$3,000 for a total of \$40,895) for a total of \$1,240,895 for the first 3 year period and (telemetry \$800 X 500 patients = \$400,000 X one level II STEMI center X 1 year = \$400,000) + (\$1,500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level II STEMI center X 1 year = \$1,500) for a total of \$401,500 for one level II STEMI center annually thereafter.

- e) Electronic pressure monitoring and pulse oximetry - (electronic pressure monitoring devices \$100 X 25 = \$2,500 X 3 years X one level II STEMI center = \$7,500) + (pulse oximetry devices \$100 X 25 = \$2,500 X 3 years X one level II STEMI center = \$7,500) for a total of \$15,000 for the first 3 year period and electronic pressure monitoring devices \$100 X 25 X one level II STEMI center = \$2,500 + pulse oximetry devices \$100 X 25 X one level II STEMI center = \$2,500 for a total of \$5,000 annually thereafter.
- f) End-tidal carbon dioxide monitor - \$3,900 X one level II STEMI center X 1 year (first year) = \$3,900 for the first year + \$1,500 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$6,900 for the first 3 year period and \$1,500 X one level II STEMI center X 1 year = \$1,500 annually thereafter.
- g) Patient weight devices - \$1000 X one level II STEMI center X 1 year (the first year) = \$1,000 + \$250 annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$500 for a total of \$1,500 for the first 3 year period and \$250 X one level II STEMI center X 1 year = \$250 annually thereafter.
- h) Drugs, intravenous fluids and supplies - (drugs are already accounted for in letter d above) (all standard intravenous fluids \$4.00 each X 500 patients = \$2,000 X 3 years X one level II STEMI center = \$6,000) + (all standard administration devices \$4.00 each X 500 patients = \$2,000 X 3 years X one level II STEMI center = \$6,000) + (all standard intravenous catheters \$4.00 each X 500 patients = \$2,000 X 3 years X one level II STEMI center = \$6,000) for a total of \$18,000 for the first 3 year period and (all standard intravenous fluids \$4.00 each X 500 patients X one level II STEMI center = \$2,000) + (all standard administration devices \$4.00 each X 500 patients X one level II STEMI center = \$2,000) + (all standard intravenous catheters \$4.00 each X 500 patients X one level II STEMI center = \$2,000) for a total of \$6,000 annually thereafter.
- i) External pacemaker - \$10 per set for pacer electrodes average cost (this will be used with the cardiac defibrillator already accounted for in d above) X 30 = \$300 X one level II STEMI center X 3 years = \$900 for the first 3 year period and \$10 per set X 30 = \$300 X one level II STEMI center X 1 year = \$300 annually thereafter.
- j) Transvenous pacemaker - \$200 average cost of pacer wires and equipment X 30 = \$6,000 X one level II STEMI center X 3 years =

\$18,000 + generator cost \$7,000 X 5 generators = \$35,000 for the first year + \$1,000 X 2 years (years 2 through 3) for maintenance and upkeep of generators for a total of \$37,000 for the generators and a total of \$55,000 for the first 3 year period and \$200 average cost X 30 = \$6,000 + \$1,000 for the maintenance and upkeep of the generator = \$7,000 X one level II STEMI center X 1 year = \$7,000 annually thereafter.

- k) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II STEMI center for the intensive care unit for the first 3 year period - \$86,800 (letter a above) + \$76,615 (letter b above) + \$4,600 (letter c above) + \$1,240,895 (letter d above) + \$15,000 (letter e above) + \$6,900 (letter f above) + \$1,500 (letter g above) + \$18,000 (letter h above) + \$900 (letter i above) + \$55,000 (letter j above) + \$75,000 (letter k above) = \$1,581,210 for the first 3 year period.

Total cost for resuscitation equipment for one level II STEMI center for the intensive care unit for annually thereafter - \$27,100 (letter a above) + \$25,425 (letter b above) + \$1,000 (letter c above) + \$401,500 (letter d above) + \$5,000 (letter e above) + \$1,500 (letter f above) + \$250 (letter g above) + \$6,000 (letter h above) + \$300 (letter i above) + \$7,000 (letter j above) + \$25,000 (letter k above) = \$500,075 for annually thereafter.

- 4) Cardiac Catheterization lab diagnostic and interventional equipment-
- a) Sheaths - \$2,000 average cost X 500 = \$1,000,000 X one level II STEMI center X 3 years = \$3,000,000 for the first 3 year period and \$2,000 X 500 = \$1,000,000 X one level II STEMI center X 1 year = \$1,000,000 annually thereafter.
  - b) Diagnostic wires - \$200 average cost X 250 = \$50,000 X one level II STEMI center X 3 years = \$150,000 for the first 3 year period and \$200 X 250 = \$50,000 X one level II STEMI center X 1 year = \$50,000 annually thereafter.
  - c) Diagnostic catheters - \$200 average cost X 250 = \$50,000 X one level II STEMI center X 3 years = \$150,000 for the first 3 year period and \$200 X 250 = \$50,000 X one level II STEMI center X 1 year = \$50,000 annually thereafter.
  - d) Manifold or contrast injector/delivery system - \$200 average cost X 250 = \$50,000 X one level II STEMI center X 3 years = \$150,000 for the first 3 year period and \$200 X 250 = \$50,000 X one level II STEMI center X 1 year = \$50,000 annually thereafter.
  - e) Pressure tubing - \$125.00 average cost for 96 inches of pressure tubing X 250 = \$31,250 X one level II STEMI center X 3 years =

\$93,750 for the first 3 year period and \$125.00 average cost for 96 inches X 250 = \$31,250 X one level II STEMI center X 1 year = \$31,250 annually thereafter.

- f) Interventional guide wires - \$350 X 250 = \$87,500 X one level II STEMI center X 3 years = \$262,500 for the first 3 year period and \$350 X 250 = \$87,500 X one level II STEMI center X 1 year = \$87,500 annually thereafter.
- g) Interventional guide catheters - \$26 X 250 = \$6,500 X one level II STEMI center X 3 years = \$19,500 for the first 3 year period and \$26 X 250 = \$6,500 X one level II STEMI center X 1 year = \$6,500 annually thereafter.
- h) Balloon catheters (compliant and non-compliant) - \$500 X 250 = \$125,000 X one level II STEMI center X 3 years = \$375,000 for the first 3 year period and \$500 X 250 = \$125,000 X one level II STEMI center X 1 year = \$125,000 annually thereafter.
- i) Stents (bare metal stents and drug eluting stents) – (bare metal stent \$1,000 X 100 = \$100,000) + (drug eluting stents \$2,500 X 150 = \$375,000) for a total of \$475,000 X one level II STEMI center X 3 years = \$1,425,000 for the first 3 year period and (bare metal stent \$1,000 X 100 = \$100,000) + (drug eluting stents \$2,500 X 150 = \$375,000) for a total of \$475,000 X one level II STEMI center X 1 year = \$475,000 annually thereafter.
- j) Balloon pump catheters - \$500 X 250 = \$125,000 X one level II STEMI center X 3 years = \$375,000 for the first 3 year period and \$500 X 250 = \$125,000 X one level II STEMI center X 1 year = \$125,000 annually thereafter.
- k) Thrombectomy aspiration catheters/mechanical thrombectomy device - \$600 X 250 = \$150,000 X one level II STEMI center X 3 years = \$450,000 for the first 3 year period and \$600 X 250 = \$150,000 X one level II STEMI center X 1 year = \$150,000 annually thereafter.
- l) Balloon pump - (\$73,000 X 1 machine X one level II STEMI center X 1 year = \$73,000 for the first year) + (\$3,000 for upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$6,000) = for a total of \$79,000 for the first 3 year period and \$3000 for upkeep and maintenance X one level II STEMI center X 1 year = \$3,000 annually thereafter.
- m) Embolic protection device - \$4,000 X 50 = \$200,000 X one level II STEMI center X 3 years = \$600,000 for the first 3 year period and \$200,000 X one level II STEMI center X 1 year = \$200,000 annually thereafter.

Total cost for cardiac catheterization lab diagnostic and interventional equipment for one level II STEMI center for the first 3 year period - \$3,000,000 (letter a above) + \$150,000 (letter b above) + \$150,000 (letter c above) + \$150,000 (letter d above) + \$93,750 (letter e above) + \$262,500 (letter f above) + \$19,500 (letter g above) + \$375,000 (letter h above) + \$1,425,000 (letter i above) + \$375,000 (letter j above) + \$450,000 (letter k above) + \$79,000

(letter l above) + \$600,000 (letter m above) = \$7,129,750 for the first 3 year period.

Total cost for cardiac catheterization lab diagnostic and interventional equipment for one level II STEMI center for annually thereafter - \$1,000,000 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$50,000 (letter d above) + \$31,250 (letter e above) + \$87,500 (letter f above) + \$6,500 (letter g above) + \$125,000 (letter h above) + \$475,000 (letter i above) + \$125,000 (letter j above) + \$150,000 (letter k above) + \$3,000 (letter l above) + \$200,000 (letter m above) = \$2,353,250 for annually thereafter.

5) Cardiac catheterization lab resuscitation equipment -

- a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes - (laryngoscopes at least 2 X \$300 each = \$600 X one level II STEMI center X 3 years = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period) + (mechanical ventilator \$7,000 X one level II STEMI center X 1 year (the first year) = \$7,000 + \$1,500 for annual upkeep and maintenance of ventilator X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$10,000) for a total of \$49,300 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level II STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 1 year = \$12,500) + (mechanical ventilator \$1,500 annual upkeep and maintenance X one level II STEMI center X 1 year = \$1,500) for a total of \$14,600 annually thereafter.
- b) Bag-mask resuscitator and sources of oxygen - (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period) + (air outlet \$70 X 7 = \$490 X one level II STEMI center X 1 year (the first year) = \$490 + \$150 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level II STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for

the first three year period) for a total of \$114,115 for the first 3 year period and (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 1 year = \$12,500) + (air outlet \$150 for annual upkeep and maintenance X one level II STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level II STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) for a total of \$37,925 annually thereafter.

- c) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X one level II STEMI center X 3 years = \$1,200,000 for the first 3 year period) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X one level II STEMI center X 1 year (the first year) = \$37,895 + \$1,500 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period) for a total of \$1,240,895 for the first 3 year period and (telemetry \$800 X 500 patients = \$400,000 X one level II STEMI center X 1 year = \$400,000) + (\$1,500 for annual upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level II STEMI center X 1 year = \$1,500) for a total of \$401,500 annually thereafter.
- e) All standard intravenous fluids and administration devices and intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) for a total of \$18,000 for the first 3 year period (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.

- f) Drugs and supplies necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 100 patients = \$10,000 X one level II STEMI center X 3 years = \$30,000 for the first 3 year period and \$10,000 X one level II STEMI center X 1 year = \$10,000 annually thereafter.
- g) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II STEMI center for the cardiac catheterization lab for the first 3 year period - \$49,300 (letter a above) + \$114,115 (letter b above) + \$75,000 (letter c above) + \$1,240,895 (letter d above) + \$18,000 (letter e above) + \$30,000 (letter f above) + \$75,000 (letter g above) = \$1,602,310 for the first 3 year period.

Total cost for resuscitation equipment for one level II STEMI center for the cardiac catheterization lab for annually thereafter - \$14,600 (letter a above) + \$37,925 (letter b above) + \$25,000 (letter c above) + \$401,500 (letter d above) + \$6,000 (letter e above) + \$10,000 (letter f above) + \$25,000 (letter g above) = \$520,025 for annually thereafter.

- 6) Resuscitation equipment for the intermediate care unit –
  - a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes - (laryngoscopes at least 2 X \$300 each = \$600 X one level II STEMI center X 3 years = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period) + (mechanical ventilator \$7,000 X one level II STEMI center X 1 year (the first year) = \$7,000 + \$1,500 for annual upkeep and maintenance of ventilator X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$10,000) for a total of \$49,300 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level II STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 1 year = \$12,500) + (mechanical ventilator \$1,500 annual upkeep and maintenance X one level II STEMI center X 1 year = \$1,500) for a total of \$14,600 annually thereafter.
  - b) Bag-mask resuscitator and sources of oxygen - (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period) + (air outlet \$70 X 7 = \$490 X one level II STEMI center X 1 year (the first year) = \$490 + \$150 for annual upkeep and maintenance X one level II STEMI center X 2



years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level II STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$114,115 for the first 3 year period and (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 1 year = \$12,500) + (air outlet \$150 for annual upkeep and maintenance X one level II STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level II STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) for a total of \$37,925 annually thereafter.

- c) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X one level II STEMI center X 3 years = \$1,200,000 for the first 3 year period) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X one level II STEMI center X 1 year (the first year) = \$37,895 + \$1,500 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period) for a total of \$1,240,895 for the first 3 year period and (telemetry \$800 X 500 patients = \$400,000 X one level II STEMI center X 1 year = \$400,000) + (\$1,500 for annual upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level II STEMI center X 1 year = \$1,500) for a total of \$401,500 annually thereafter.



- e) All standard intravenous fluids and administration devices and intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) for a total of \$18,000 for the first 3 year period (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- f) Drugs and supplies necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 100 patients = \$10,000 X one level II STEMI center X 3 years = \$30,000 for the first 3 year period and \$10,000 X one level II STEMI center X 1 year = \$10,000 annually thereafter.
- g) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$50 X 500 patients = \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II STEMI center for the intermediate care unit for the first 3 year period - \$49,300 (letter a above) + \$114,115 (letter b above) + \$75,000 (letter c above) + \$1,240,895 (letter d above) + \$18,000 (letter e above) + \$30,000 (letter f above) + \$75,000 (letter g above) = \$1,602,310 for the first 3 year period.

Total cost for resuscitation equipment for one level II STEMI center for the intermediate care unit for annually thereafter - \$14,600 (letter a above) + \$37,925 (letter b above) + \$25,000 (letter c above) + \$401,500 (letter d above) + \$6,000 (letter e above) + \$10,000 (letter f above) + \$25,000 (letter g above) = \$520,025 for annually thereafter.

- 7) Resuscitation equipment for the radiology department -
  - a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level II STEMI center X 3 years = \$1,800 for the first 3 year period and at least 2 X \$300 each = \$600 X one level II STEMI center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period and \$250 for a pack of 10 X 50 X one

- level II STEMI center X 1 year = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period and \$250 for a pack of 10 X 50 packs X one level II STEMI center = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level II STEMI center X 1 year (the first year) = \$490 for the first year + \$150 annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level II STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$76,615 for the first 3 year period and (air outlet \$70 X 7 = \$490 X one level II STEMI center X 1 year = \$490) + (regulator for air outlet \$35 X 25 = \$875 X one level II STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) for a total of \$25,765 for annually thereafter.
- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$50 X 500 X one level II STEMI center X 1 year = \$25,000 annually thereafter.
- f) Telemetry- average of \$800 X 500 patients = \$400,000 X one level II STEMI center X 3 years = \$1,200,000 for the first 3 year period and \$800 X 500 patients X one level II STEMI center X 1 year = \$400,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level II STEMI center = \$37,895 X 1 year (first year) = \$37,895 for the first year + \$1,500 for the annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for the annual upkeep and maintenance X one

- level II STEMI center X 1 year = \$1,500 for annually thereafter.
- h) All standard administration devices - \$4.00 each X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period and \$2,000 X one level II STEMI center X 1 year = \$2,000 annually thereafter.
- i) All standard intravenous catheters - \$4.00 each X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period and \$2,000 X one level II STEMI center X 1 year = \$2,000 annually thereafter.
- j) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level II STEMI center X 3 years = \$150,000 for the first 3 year period and \$50,000 X one level II STEMI center X 1 year = \$50,000 annually thereafter.
- k) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II STEMI center for the radiology department for the first 3 year period - \$1,800 (letter a above) + \$37,500 (letter b above) + \$37,500 (letter c above) + \$76,615 (letter d above) + \$75,000 (letter e above) + \$1,200,000 (letter f above) + \$40,895 (letter g above) + \$6,000 (letter h above) + \$6,000 (letter i above) + \$150,000 (letter j above) + \$75,000 (letter k above) = \$1,706,310 for the first 3 year period.

Total cost for resuscitation equipment for one level II STEMI center for the radiology department for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,765 (letter d above) + \$25,000 (letter e above) + \$400,000 (letter f above) + \$1,500 (letter g above) + \$2,000 (letter h above) + \$2,000 (letter i above) + \$50,000 (letter j above) + \$25,000 (letter k above) = \$556,865 for annually thereafter.

- 8) Monitoring equipment to fully support the STEMI patient during the time the patient is physically present in the radiology department and during transportation to and from the radiology department - (\$1,800 each X 8 machines = \$14,400 X one level II STEMI center X 1 year (the first year) = \$14,400) + (\$150 for upkeep and maintenance X 8 machines X 2 years (years 2 through 3) X one level II STEMI center = \$2,400) for a total of \$16,800 for the first 3 year period and \$150 X 8 machines X 1 year X one level II STEMI center = \$1,200 annually thereafter.
- 9) X-ray capability - (\$150,000 X 1 machine = \$150,000 X one level II STEMI center X 1 year (the first year) = \$150,000) + (\$500 for upkeep and maintenance X 1 machine X 2 years (years 2 through 3) X one level II STEMI center = \$1,000) for a total of \$151,000 for the first 3

year period and \$500 for upkeep and maintenance X 1 machine X 1 year X one level II STEMI center = \$500 annually thereafter.

10) In-house computerized tomography - \$1,000,000 average for CT machine = \$1,000,000 X one level II STEMI center X 1 year (the first year) = \$1,000,000 for the first year + \$200,000 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$400,000 for a total of \$1,400,000 for the first 3 year period and \$200,000 for annual upkeep and maintenance X one level II STEMI centers X 1 year = \$200,000 annually thereafter.

11) Operating rooms shall have at least the following equipment:

a) Thermal control equipment for patient and resuscitation fluids - (temperature control devices \$2,750 each X 2 devices = \$5,500 X one level II STEMI center X 1 year (the first year) = \$5,500 + \$2,750 X 1 device = \$2,750 for replacement X 2 years (years 2 through 3) X one level II STEMI center = \$5,500 for a total of \$11,000 for the first 3 year period ) + (blankets \$270 pack of 10 X 50 = \$13,500 X one level II STEMI center X 3 years = \$40,500 for the first 3 year period) + (resuscitation fluids \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period) for a total of \$126,500 for the first 3 year period and (temperature control devices \$2,750 each X 1 device X 1 year = \$2,750 for replacement X one level II STEMI center = \$2,750) + (blankets \$270 pack of 10 X 50 = \$13,500 X one level II STEMI center X 1 year = \$13,500) + (resuscitation fluids \$50 X 500 patients = \$25,000 X one level II STEMI center = \$25,000) for a total of \$41,250 for annually thereafter.

b) X-ray capability - (\$150,000 X 1 machine = \$150,000 X one level II STEMI center X 1 year (the first year) = \$150,000) + (\$500 for upkeep and maintenance X 1 machine X 2 years (years 2 through 3) X one level II STEMI center = \$1,000) for a total of \$151,000 for the first 3 year period and \$500 for upkeep and maintenance X 1 machine X 1 year X one level II STEMI center = \$500 annually thereafter.

c) Instruments and equipment necessary for cardiothoracic surgery capability – estimate of \$3,000 X one level II STEMI center X 3 years = \$9,000 for the first 3 year period and \$3,000 X one level II STEMI center X 1 year = \$3,000 annually thereafter.

d) Patient Monitoring equipment - \$10,000 X 5 machines X one level II STEMI center X 1 year (the first year) = \$50,000 for the first year + \$500 for annual upkeep and maintenance X 5 machines X one level II STEMI center X 2 years (years 2 through 3) = \$5,000 for a total of \$55,000 for the first 3 year period and \$500 for annual upkeep and maintenance X 5 machines X one level II STEMI center X 1 year = \$2,500 annually thereafter.

Total cost for operating room equipment for one level II STEMI center for the first 3 year period - \$126,500 (letter a above) + \$151,000 (letter b above) + \$9,000 (letter c above) + \$55,000 (letter d above) = \$341,500 for the first 3 year period.

Total cost for operating room equipment for one level II STEMI center for annually thereafter - \$41,250 (letter a above) + \$500 (letter b above) + \$3,000 (letter c above) + \$2,500 (letter d above) = \$47,250 for annually thereafter.

**12) Resuscitation equipment available to the operating room**

- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level II STEMI center X 3 years = \$1,800 for the first 3 year period and \$600 X one level II STEMI center X 1 year = \$600 annually thereafter.
- b) Endotracheal tubes of all sizes - 250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period and \$12,500 X one level II STEMI center X 1 year = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period and \$12,500 X one level II STEMI center X 1 year = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level II STEMI center X 1 year (the first year) = \$490 for the first year + air outlet annual upkeep and maintenance \$150 X one level II STEMI center X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level II STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$76,615 for the first 3 year period and (air outlet annual upkeep and maintenance \$150 X one level II STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level II STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 1 year = \$21,000) + (regulator for oxygen tank

- $\$30 \times 25 = \$750$  X one level II STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) for a total of \$25,425 annually thereafter.
- e) Suction devices - suction devices canisters and tubing for wall suction  $\$50 \times 500$  patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.
  - f) Telemetry- average of  $\$800 \times 500$  patients = \$400,000 X one level II STEMI center X 3 years = \$1,200,000 for the first 3 year period and \$400,000 X one level II STEMI center X 1 year = \$400,000 annually thereafter.
  - g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level II STEMI center X 1 year (the first year) = \$37,895 + \$1,500 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for the annual upkeep and maintenance X one level II STEMI center X 1 year = \$1,500 annually thereafter.
  - h) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) for a total of \$18,000 for the first 3 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
  - i) Drugs necessary for emergency care- e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate  $\$100 \times 500$  patients = \$50,000 X one level II STEMI center X 3 years = \$150,000 for the first 3 year period and  $\$100 \times 500$  patients X one level I STEMI center X 1 year = \$50,000 annually thereafter.
  - j) Supplies necessary for emergency care (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) -  $\$50 \times 500$  patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and  $\$50 \times 500$  patients = \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II STEMI center for the operating room for the first 3 year period - \$1,800 (letter a above) + \$37,500 (letter b above) + \$37,500 (letter c above) + \$76,615 (letter d above) + \$75,000 (letter e above) + \$1,200,000 (letter f above) + \$40,895 (letter g above) + \$18,000 (letter h above) + \$150,000 (letter i above) + \$75,000 (letter j above) = \$1,712,310 for the first 3 year period.

Total cost for resuscitation equipment for one level II STEMI center for the operating room for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,425 (letter d above) + \$25,000 (letter e above) + \$400,000 (letter f above) + \$1,500 (letter g above) + \$6,000 (letter h above) + \$50,000 (letter i above) + \$25,000 (letter j above) = \$558,525 for annually thereafter.

**13) Resuscitation equipment for the Post-Anesthesia Recovery room (PAR) -**

a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes, bag-mask resuscitator, sources of oxygen and a mechanical ventilator - (laryngoscopes at least 2 X \$300 each = \$600 X one level II STEMI center X 3 years = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period) + (bag-mask resuscitator \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period) + (mechanical ventilator \$7,000 X one level II STEMI center X 1 year (the first year) = \$7,000 + \$1,500 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$10,000 for the first 3 year period) + (air outlet \$70 X 7 = \$490 X one level II STEMI center X 1 year (the first year) = \$490 + \$150 for annual upkeep and maintenance X 2 years (years 2 through 3) X one level II STEMI center = \$300 for a total of \$790 for the first 3 year period) + (regulator \$35 X 25 = \$875 X one level II STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 patients = \$1,050 X one level II STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$163,415 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level II STEMI center X 1 year = \$600) +



(endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 1 year = \$12,500) + (bag-mask resuscitator \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 1 year = \$12,500) + (mechanical ventilator \$1,500 for annual upkeep and maintenance X one level II STEMI center X 1 year = \$1,500) + (air outlet \$150 for annual upkeep and maintenance X one level II STEMI center X 1 year = \$150) + (regulator \$35 X 25 = \$875 X one level II STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 patients = \$1,050 X one level II STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) for a total of \$52,525 annually thereafter.

- b) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$50 X 500 patients X one level II STEMI center X 1 year = \$25,000 annually thereafter.
- c) Telemetry, electrocardiograph capability, cardiac monitor and defibrillator - (telemetry average \$800 X 500 patients = \$400,000 X one level II STEMI center X 3 years = \$1,200,000 for the first 3 year period) + (electrocardiograph, cardiac monitor and defibrillator \$37,895 X one level II STEMI center X 1 year (the first year) = \$37,895 for the first year + \$1,500 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for electrocardiograph, cardiac monitor and defibrillator) for a total of \$1,240,895 for the first 3 year period and \$1,500 for annual upkeep and maintenance X one level II STEMI center X 1 year = \$1,500 + telemetry average \$800 X 500 patients = \$400,000 X one level II STEMI center X 1 year = \$400,000 for a total of \$401,500 annually thereafter.
- d) All standard intravenous fluids and administration devices, including intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard administration devices X 500 patients X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) for a total of \$18,000 for the first 3 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients X one level II STEMI center X 1 year = \$2,000 for the first 3 year period) + (\$4.00



each for standard intravenous catheters X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.

- e) Drugs and supplies necessary for emergency care - saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level II STEMI center X 3 years = \$150,000 for the first 3 year period and \$50,000 X one level II STEMI center X 1 year = \$50,000 annually thereafter.
- f) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.

**Total cost for resuscitation equipment for one level II STEMI center for the post-anesthesia recovery room (PAR) for the first 3 year period - \$163,415 (letter a above) + \$75,000 (letter b above) + \$1,240,895 (letter c above) + \$18,000 (letter d above) + \$150,000 (letter e above) + \$75,000 (letter f above) = \$1,722,310 for the first 3 year period.**

**Total cost for resuscitation equipment for one level II STEMI center for the post-anesthesia recovery room (PAR) for annually thereafter - \$52,525 (letter a above) + \$25,000 (letter b above) + \$401,500 (letter c above) + \$6,000 (letter d above) + \$50,000 (letter e above) + \$25,000 (letter f above) = \$560,025 for annually thereafter.**

#### **14) Laboratory Services -**

- a) Standard analyses of blood, urine and other body fluids - costs of materials \$200 X 500 patients = \$100,000 X one level II STEMI center X 3 years = \$300,000 for the first 3 year period and \$200 X 500 patients X one level II STEMI center X 1 year = \$100,000 annually thereafter.
- b) Blood typing and cross matching - centrifuge \$2,000 X one level II STEMI center X 1 year (the first year) = \$2,000 + \$250 for the annual upkeep and maintenance of the centrifuge X one level II STEMI center X 2 years (years 2 through 3) = \$500 for a total of \$2,500 for the first 3 year period and \$250 for the annual upkeep and maintenance of the centrifuge X one level II STEMI center X 1 year = \$250 annually thereafter.
- c) Coagulation studies - \$200 materials X 250 patients = \$50,000 X one level II STEMI center X 3 years = \$150,000 for the first 3 year period and \$200 materials X 250 patients = \$50,000 X one level II STEMI center X 1 year = \$50,000 annually thereafter.
- d) Blood bank or access to a community central blood bank and adequate hospital blood storage facilities - at the least blood storage refrigerators 1 large refrigerator / use of community central blood bank at \$15,000 X one level II STEMI center X 1 year (the first year) = \$15,000 + \$1,500 for the annual upkeep and

maintenance of the blood storage refrigerator X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$18,000 for the first 3 year period and \$1,500 for the annual upkeep and maintenance of the blood storage refrigerator X one level II STEMI center X 1 year = \$1,500 annually thereafter.

e) Blood gases and pH determinations - at least 1 blood gas analyzer and kit \$3,000 X one level II STEMI center X 3 years = \$9,000 for the first 3 year period and \$3,000 X one level II STEMI center X 1 year = \$3,000 annually thereafter.

f) Blood chemistries- test and kits average of \$350 X 100 patients = \$35,000 X one level II STEMI center X 3 years = \$105,000 for the first 3 year period and \$350 X 100 patients X one level II STEMI center X 1 year = \$35,000 annually thereafter.

Total cost for laboratory services for one level II STEMI center for the first 3 year period - \$300,000 (letter a above) + \$ 2,500 (letter b above) + \$150,000 (letter c above) + \$18,000 (letter d above) + \$9,000 (letter e above) + \$105,000 (letter f above) = \$584,500 for the first 3 year period.

Total cost for laboratory services for one level II STEMI center for annually thereafter - \$100,000 (letter a above) + \$250 (letter b above) + \$50,000 (letter c above) + \$1,500 (letter d above) + \$3,000 (letter e above) + \$35,000 (letter f above) = \$189,750 for annually thereafter.

15) Angiography with interventional capability for cardiac catheterization lab – average of \$1,000,000 X one level II STEMI center X 1 year (the first year) = \$1,000,000 for the first year + \$200,000 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$400,000 for a total of \$1,400,000 for the first 3 year period and \$200,000 for annual upkeep and maintenance X one level II STEMI center X 1 year = \$200,000 annually thereafter.

Total cost for medical equipment for one level II STEMI center for the first 3 year period - \$3,600 (number 1 above) + \$1,170,885 (number 2 above) + \$1,581,210 (number 3 above) + \$7,129,750 (number 4 above) + \$1,602,310 (number 5 above) + \$1,602,310 (number 6 above) + \$1,706,310 (number 7 above) + \$16,800 (number 8 above) + \$151,000 (number 9 above) + \$1,400,000 (number 10 above) + \$341,500 (number 11 above) + \$1,712,310 (number 12 above) + \$1,722,310 (number 13 above) + \$584,500 (number 14 above) + \$1,400,000 (number 15 above) = \$22,124,795 for the first 3 year period.

Total cost for medical equipment for one level II STEMI center for annually thereafter - \$1,200 (number 1 above) + \$364,275 (number 2 above) + \$500,075 (number 3 above) + \$2,353,250 (number 4 above) + \$520,025 (number 5 above) + \$520,025 (number 6 above) + \$556,865 (number 7

above) + \$1,200 (number 8 above) + \$500 (number 9 above) + \$200,000 (number 10 above) + \$47,250 (number 11 above) + \$558,525 (number 12 above) + \$560,025 (number 13 above) + \$189,750 (number 14 above) + \$200,000 (number 15 above) = \$6,572,965 for annually thereafter.

**D. The STEMI center shall have support services to assist the patient's family from time of entry into the facility to time of discharge - at least 1 full time equivalent medical social worker \$66,000 annually X one level II STEMI center X 3 years= \$198,000 for the first 3 year period and \$66,000 X one level II STEMI center X 1 year = \$66,000 annually thereafter.**

**E. The STEMI center shall have a cardiac rehabilitation program or a written network agreement for the provision of cardiac rehabilitation - at least 2 registered nurses X \$67,623 annually X one level II STEMI center X 3 years = \$405,738 for the first 3 year period and \$67,623 X 2 registered nurses X one level I STEMI center X 1 year = \$135,246 annually thereafter.**

**F. Courses/conferences for program manager - attend one national regional or state meeting every 3 years focused on cardiovascular disease.**

- 1) National or international STEMI course or conference - (\$1200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level II STEMI centers X 3 years = \$0 for the first 3 year period and \$2,950 X no level II STEMI centers X 1 year = \$0 annually thereafter.**
- 2) Regional STEMI course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level II STEMI center X 1 time during a 3 year period = \$1,750 for the first 3 year period and \$1,750 X one level II STEMI center X 1 year = \$1,750 annually thereafter.**
- 3) State STEMI course or conference - (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level II STEMI centers X 3 years = \$0 for the first 3 year period and \$1,150 X no level II STEMI centers X 1 year = \$0 annually thereafter.**

**G. STEMI registry**

- 1) Computer with internet capability/access \$600 computer + internet fee \$100/month \$1,200 annually X one level II STEMI center X 3 years = \$5,400 for the first 3 year period and \$1,800 X one level II STEMI center X 1 year = \$1,800 annually thereafter.**
- 2) Patient registrar - \$36,258 annually X one level II STEMI center X 3 years = \$108,774 for the first 3 year period and \$36,258 X one level II STEMI center X 1 year = \$36,258 annually thereafter.**
- 3) Training to set up STEMI registry system/program for data entry- \$200 annually X one level II STEMI center X 3 years = \$600 for the first 3 year period and \$200 X one level II STEMI center X 1 year = \$200 annually thereafter.**

- H. Public education program to promote STEMI prevention and STEMI symptoms awareness - e.g. community health fairs costs of printing and advertisement costs (posters, brochures etc...) \$350 for each health fair x 12 health fairs annually = \$4,200 annually X one level II STEMI center X 3 years = \$12,600 for the first 3 year period and \$4,200 X one level II STEMI center X 1 year = \$4,200 annually thereafter.**
- I. Patient education program to promote STEMI prevention and STEMI symptoms awareness - printing costs of brochures etc... \$500 annually X one level II STEMI center X 3 years = \$1,500 for the first 3 year period and \$500 X one level II STEMI center X 1 year = \$500 annually thereafter.**
- J. Professional education outreach program to provide training on caring for STEMI patients - e.g. hospitals sponsor at least 1 conference per year within their service area at the cost of \$2,000 annually X one level II STEMI center X 3 years = \$6,000 for the first 3 year period and \$2,000 X one level II STEMI center X 1 year = \$2,000 annually thereafter.**
- K. STEMI centers shall be actively involved in local and regional EMS systems by providing training and clinical educational resources - hospitals sponsor at least 1 conference per year within their area for EMS at the cost of \$2,000 annually X one level II STEMI center X 3 years = \$6,000 for the first 3 year period and \$2,000 X one level II STEMI center X 1 year = \$2,000 annually thereafter.**
- L. A lighted designated helicopter landing area at the STEMI center to accommodate incoming medical helicopters which shall be cordoned off at all times from the general public. The STEMI center shall also have a landing area on the hospital premises no more than three (3) minutes from the emergency room - (construction of helipad estimate of \$36,000 X 1 helipad X one level II STEMI center X 1 year (the first year) = \$36,000) + (maintenance and upkeep of helipad \$2,000 X 2 years (years 2 through 3) X one level II STEMI center = \$4,000) for a total of \$40,000 for the first 3 year period for the helipad + (cordoning barrier \$4,300 X 1 year (the first year) X one level II STEMI center = \$4,300) + \$500 for maintenance and upkeep of the cordoning barrier X 2 years (years 2 through 3) X one level II STEMI center = \$1,000) for a total of \$5,300 for the first 3 year period for the cordoning barrier for a total of \$45,300 for the first 3 year period and \$500 for maintenance and upkeep of the cordoning barrier X 1 year X one level II STEMI center = \$500 + \$500 for maintenance and upkeep of helipad X 1 year X one level II STEMI center = \$500 for a total of \$1,000 annually thereafter.**

**Total cost for one level II STEMI center for the first 3 year period - [\$28,402,965 letter A] + [\$4,739.43 letter B] + [\$22,124,795 letter C] + [\$198,000 letter D] + [\$405,738 letter E] + [\$1,750 letter F] + [\$114,774 letter G] + [\$12,600 letter H] + [\$1,500 letter I] + [\$6,000**

letter J] + [\$6,000 letter K] + [\$45,300 letter L] = \$51,324,161 for the first 3 year period.

Total cost for one level II STEMI center for annually thereafter -  
[\$9,467,655 letter A] + [\$1,579.81 letter B] + [\$6,572,965 letter C] +  
[\$66,000 letter D] + [\$135,246 letter E] + [\$1,750 letter F] +  
[\$38,258 letter G] + [\$4,200 letter H] + [\$500 letter I] + [\$2,000  
letter J] + [\$2,000 letter K] + [\$1,000 letter L] = \$16,293,153 for  
annually thereafter.

It is expected that two level II STEMI centers will be designated during the first 3 year period (\$102,648,322) and those same level II STEMI centers will be designated again at some time (3 year intervals) annually thereafter (\$32,586,306).

### 3. Level III STEMI centers.

#### A. Salary costs for medical professionals.

- 1) A physician experienced in diagnosing and treating cardiovascular disease - \$204,430 annually X one level III STEMI center = \$204,430 X 3 years = \$613,290 for the first 3 year period and \$204,430 annually X one level III STEMI center X 1 year = \$204,430 annually thereafter.
- 2) At least 1 other health care professional or qualified individual credentialed in STEMI care - \$126,046 annually X one level III STEMI center = \$126,046 X 3 years = \$378,138 for the first 3 year period and \$126,046 annually X one level III STEMI center X 1 year = \$126,046 annually thereafter.
- 3) STEMI center medical director who is recommended to be a board certified or board admissible physician - \$204,430 annually X 3 years X one level III STEMI center = \$613,290 for the first 3 year period and \$204,430 annually X one level III STEMI center X 1 year = \$204,430 annually thereafter.
- 4) STEMI program manager/coordinator who is a registered nurse or a qualified individual - \$126,046 annually X one level III STEMI center = \$126,046 X 3 years = \$378,138 for the first 3 year period and \$126,046 annually X one level III STEMI center X 1 year = \$126,046 annually thereafter.
- 5) An internal medicine physician - \$181,823 annually X one level III STEMI center = \$181,823 X 3 years = \$545,469 for the first 3 year period and \$181,823 annually X one level III STEMI center X 1 year = \$181,823 annually thereafter.
- 6) A diagnostic radiologist - \$402,539 annually X one level III STEMI center = \$402,539 X 3 years = \$1,207,617 for the first 3 year period and \$402,539 annually X one level III STEMI center X 1 year = \$402,539 annually thereafter.
- 7) Emergency department physician credentialed for STEMI care by the STEMI center 24 hours a day, 7 days a week - \$244,973 annually X 3 emergency department physicians X one level III STEMI center = \$734,919 X 3 years = \$2,204,757 for the first 3 year period and

\$244,973 annually X 3 physicians X one level III STEMI center X 1 year = \$734,919 annually thereafter.

- 8) Registered nurses in the emergency department - \$64,533 annually X 5 registered nurses in the emergency department = \$322,665 X one level III STEMI center = \$322,665 X 3 years = \$967,995 for the first 3 year period and \$322,665 X one level III STEMI center X 1 year = \$322,665 annually thereafter.
- 9) Medical director of the emergency department - \$199,038 annually X one level III STEMI center = \$199,038 X 3 years = \$597,114 for the first 3 year period and \$199,038 X one level III STEMI center X 1 year = \$199,038 annually thereafter.
- 10) Intermediate care unit medical director - \$177,560 annually X one level III STEMI center = \$177,560 X 3 years = \$532,680 for the first 3 year period and \$177,560 annually X one level III STEMI center X one year = \$177,560 annually thereafter.
- 11) Physician on duty or available 24 hours a day, 7 days a week in the intermediate care unit - \$177,560 annually X 3 physicians in the intermediate unit - \$532,680 X one level III STEMI center = \$532,680 X 3 years = \$1,598,040 for the first 3 year period and \$177,560 annually X 3 physicians = \$532,680 annually X one level III STEMI center X 1 year = \$532,680 annually thereafter.
- 12) The intermediate care unit shall have registered nurses and other essential personnel on duty 24 hours a day 7 days a week - \$65,097 annually for the registered nurse X 4 registered nurses in the intermediate care unit = \$260,388 X one level III STEMI center = \$260,388 X 3 years = \$781,164 for the first 3 year period and \$65,097 X 4 registered nurses = \$260,388 annually X one level III STEMI center X 1 year = \$260,388 annually thereafter.
- 13) Certified Nursing Technician - \$30,000 annually X one level III STEMI center = \$30,000 X 3 years = \$90,000 for the first 3 year period and \$30,000 annually X one level III STEMI center X 1 year = \$30,000 annually thereafter.
- 14) Radiologist - average \$300,000 annually X 3 neurologist/radiologists = \$900,000 X one level III STEMI center = \$900,000 X 3 years = \$2,700,000 for the first 3 year period and \$300,000 X 3 neurologists/radiologists = \$900,000 annually X one level III STEMI center X 1 year = \$900,000 annually thereafter.
- 15) Transport nurse - average \$62,000 annually X one level III STEMI center = \$62,000 X 4 transport nurses = \$248,000 X 3 years = \$744,000 for the first 3 year period and \$62,000 annually X 4 transport nurses X one level III STEMI center X 1 year = \$248,000 annually thereafter.
- 16) Radiology technician - average \$62,000 annually X 4 radiology technicians = \$248,000 X one level III STEMI center = \$248,000 X 3 years = \$744,000 for the first 3 year period and \$62,000 annually X 4 radiology technicians X one level III STEMI center X 1 year = \$248,000 annually thereafter.
- 17) Nurse educator/supervisor to ensure staff are trained on core competencies - \$78,500 annually X one level III STEMI center = \$78,500 X 3 years = \$235,500 for the first 3 year period and \$78,500

annually X one level III STEMI center X 1 year = \$78,500 annually thereafter.

Total cost for salaries for medical professionals for one level III STEMI center for the first year 3 year period - \$613,290 (#1 above) + \$378,138 (#2 above) + \$613,290 (#3 above) + \$378,138 (#4 above) + \$545,469 (#5 above) + \$1,207,617 (#6 above) + \$2,204,757 (#7 above) + \$967,995 (#8 above) + \$597,114 (#9 above) + \$532,680 (#10 above) + \$1,598,040 (#11 above) + \$781,164 (#12 above) + \$90,000 (#13 above) + \$2,700,000 (#14 above) + \$744,000 (#15 above) + \$744,000 (#16 above) + \$235,500 (#17 above) = \$14,931,192 for the first 3 year period.

Total cost for salaries for medical professionals for one level III STEMI center for annually thereafter - \$204,430 (#1 above) + \$126,046 (#2 above) + \$204,430 (#3 above) + \$126,046 (#4 above) + \$181,823 (#5 above) + \$402,539 (#6 above) + \$734,919 (#7 above) + \$322,665 (#8 above) + \$199,038 (#9 above) + \$177,560 (#10 above) + \$532,680 (#11 above) + \$260,388 (#12 above) + \$30,000 (#13 above) + \$900,000 (#14 above) + \$248,000 (#15 above) + \$248,000 (#16 above) + \$78,500 (#17 above) = \$4,977,064 for annually thereafter.

**B) Continuing education for STEMI center staff.**

- 1) Level III STEMI center call roster member (emergency department physician) shall complete a minimum average of 8 hours of continuing education in cardiovascular disease every 2 years - average of \$10.00 per hour for online training X 4 hours X 3 years X one level III STEMI center = \$120 for the first 3 year period and \$10 X 4 hours X one level III STEMI center X 1 year = \$40 annually thereafter.
- 2) Level III STEMI center call roster member (others as appropriate) shall complete a minimum average of 8 hours of continuing education in cardiovascular disease every 2 years - average of \$10.00 per hour for online training X 4 hours X 3 years X one level III STEMI center = \$120 X 2 others as appropriate = \$240 for the first 3 year period and \$10 per hour for online training X 4 hours X one level III STEMI center X 1 year X 2 others as appropriate = \$80 annually thereafter.
- 3) A level III STEMI center medical director shall complete a minimum of 8 hours of continuing medical education every 2 years in the area of cardiovascular disease- average of \$10.00 per hour for online training X 4 hours X 3 years X one level III STEMI center = \$120 for the first 3 year period and \$10 per hour for online training X 4 hours X one level III STEMI center X 1 year = \$40 annually thereafter.
- 4) A level III program manager/coordinator shall complete a minimum of 8 hours of continuing education every 2 years in cardiovascular disease - average of \$39.99 annually for online training X 3 years X one level III STEMI center = \$119.97 for the first 3 year period and



**\$39.99 X one level III STEMI center X 1 year = \$39.99 annually thereafter.**

- 5) Emergency department physicians in level III STEMI centers shall complete a minimum average of 6 hours of continuing medical education in cardiovascular disease every 2 years - average of \$10.00 per hour for online training X 3 emergency department physicians X 3 hours of continuing medical education X 3 years X one level III STEMI center = \$270 for the first 3 year period and \$10.00 per hour for online training X 3 emergency department physicians X 3 hours of continuing medical education X one level III STEMI center X 1 year = \$90 annually thereafter.**
- 6) Registered nurses assigned to the emergency departments in level III STEMI centers shall complete a minimum of 6 hours of continuing education in the area of cardiovascular disease every 2 years - average of \$39.99 annually for online training X 5 registered nurses in the emergency department X 3 years X one level III STEMI center = \$599.85 for the first 3 year period and \$39.99 annually for online training X 5 registered nurses in the emergency department X one level III STEMI center X 1 year = \$199.95.**
- 7) Registered nurses for level III STEMI centers shall maintain core competencies in the care of the STEMI patient annually as determined by the STEMI center - average for nurse educator/supervisor \$78,500 annually X 3 years X one level III STEMI center = \$235,500 for the first 3 year period and \$78,500 X one level III STEMI center X 1 year = \$78,500 annually thereafter.**
- 8) Registered nurses assigned to the intermediate care unit in level III STEMI centers shall complete a minimum of 8 hours of continuing education in the area of cardiovascular disease every 2 years - average of \$39.99 annually for online training X 5 registered nurses in the emergency department X 3 years X one level III STEMI center = \$599.85 for the first 3 year period and \$39.99 annually for online training X 5 registered nurses in the emergency department X one level III STEMI center X 1 year = \$199.95.**

**Total cost for continuing education for one level III STEMI center for the first 3 year period - \$120 (#1 above) + \$240 (#2 above) + \$120 (#3 above) + \$119.97 (#4 above) + \$270 (#5 above) + \$599.85 (#6 above) + \$235,500 (#7 above) + \$599.85 (#8 above) = \$237,569.67 for the first 3 year period.**

**Total cost for continuing education for one level III STEMI center for annually thereafter - \$40 (#1 above) + \$80 (#2 above) + \$40 (#3 above) + \$39.99 (#4 above) + \$90 (#5 above) + \$199.95 (#6 above) + \$78,500 (#7 above) + \$199.95 (#8 above) = \$79,189.89 for annually thereafter.**

#### **C.) Medical Equipment.**

- 1) Electronic communication devices for STEMI call roster members - 2 electronic communication devices (cell phone and beeper/pager) X**



\$300 for the annual cost of each electronic communication device X 2 STEMI call roster members carrying this device (1 member on call and 1 back-up member) X 3 years X one level III STEMI center = \$3,600 for the first 3 year period and 2 electronic communications devices at \$300 each (cell phone and beeper/pager) X 2 STEMI call roster members carrying this device (1 member on call and 1 back-up member) X one level III STEMI center X 1 year = \$1,200 annually thereafter.

2) Resuscitation equipment for the emergency department -

- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level III STEMI center = \$600 X 3 years = \$1,800 for the first 3 year period and at least 2 X \$300 each = \$600 X one level III STEMI center X 1 year = \$600 annually thereafter.
- b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 25 packs = \$6,250 X one level III STEMI center X 3 years = \$18,750 for the first 3 year period and \$250 for a pack of 10 X 25 packs = \$6,250 X one level III STEMI center X 1 year = \$6,250 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 25 packs = \$6,250 X one level III STEMI center X 3 years = \$18,750 for the first 3 year period and \$250 for a pack of 10 X 25 packs = \$6,250 X one level III STEMI center X 1 year = \$6,250 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 for the first year X one level III STEMI center = \$490 + \$150 per year X 2 years (years 2 through 3) for upkeep and maintenance of air outlets for one level III STEMI center = \$300 for a total of \$790 for air outlets for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level III STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 250 patients = \$100 X 3 years X one level III STEMI center = \$300 for the first 3 year period) + (masks \$2.40 X 250 patients = \$600 X 3 years X one level III STEMI center = \$1,800 for the first 3 year period) + (ambu bags \$10.50 X 50 = \$525 X 3 years X one level III STEMI center = \$1,575 for the first 3 year period) + (oxygen tank \$70 X 150 = \$10,500 X 3 years X one level III STEMI center = \$31,500 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 3 years X one level III STEMI center = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X 3 years X one level III STEMI center = \$300 for the first 3 year period) for a total of \$41,140 for the first 3 year period and (air outlet upkeep and maintenance \$150 X one level III STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 X one level III STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 250 patients X one level III STEMI center X 1 year = \$100) + (masks \$2.40 X 250 X one level III STEMI center X 1 year = \$600) + (ambu bags \$10.50 X 50 X one level III STEMI center X 1 year = \$525) + (oxygen tank \$70 X 150 X one level III STEMI center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 25 X one level II STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet

X 250 patients X one level III STEMI center X 1 year = \$100) for a total of \$13,600 annually thereafter.

- e) Mechanical ventilator - \$7000 X one level III STEMI center = \$7,000 for the first year and \$1,500 for the annual upkeep and maintenance in the future for one level III STEMI center X 2 years (years 2 through 3) = \$3,000 for 2 years for a total of \$10,000 for the first 3 year period and \$1,500 for the upkeep and maintenance for one level III STEMI center X 1 year = \$1,500 annually thereafter.
- f) Suction devices - suction device canisters and tubing for wall suction \$50 X 250 patients = \$12,500 X one level III STEMI center = \$12,500 X 3 years = \$37,500 for the first 3 year period and \$50 X 250 patients X one level III STEMI center X 1 year = \$12,500 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 for the cost of the first year X one level III STEMI center = \$37,895 + \$1,500 for the annual upkeep and maintenance for one level III STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for upkeep and maintenance X one level III STEMI center X 1 year = \$1,500 annually thereafter.
- h) Central line insertion equipment - \$600 X 150 patients = \$90,000 X one level III STEMI center = \$90,000 X 3 years = \$270,000 for the first 3 year period and \$600 X 150 patients = \$90,000 X one level III STEMI center X 1 year = \$90,000 annually thereafter.
- i) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 250 patients = \$1,000) + (\$4.00 each for standard administration devices X 250 patients = \$1,000) + (\$4.00 each for standard intravenous catheters X 250 = \$1,000) = \$3,000 X one level III STEMI center = \$3,000 X 3 years = \$9,000 for the first 3 year period and \$3,000 X one level III STEMI center X 1 year = \$3,000 annually thereafter.
- j) Intraosseous devices - needles \$25 each X 150 patients = \$3,750 X one level III STEMI center = \$3,750 X 3 years = \$11,250 for the first 3 year period and \$25 each X 150 patients = \$3,750 X one level III STEMI center X 1 year = \$3,750 annually thereafter.
- k) Drugs necessary for STEMI emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 100 = \$10,000 X one level III STEMI center = \$10,000 X 3 years = \$30,000 for the first 3 year period and \$100 X 100 = \$10,000 X one level III STEMI center X 1 year = \$10,000 annually thereafter.
- l) Two-way communication link with emergency medical service vehicles/equipment necessary to communicate with emergency medical services regarding prehospital ECG STEMI findings - \$1,200 each X one level III STEMI center = \$1,200 for the first year + \$200 for upkeep and maintenance for one level III STEMI center X 2 years (years 2 through 3) = \$400 for

- a total of \$1,600 for the first 3 year period and \$200 for upkeep and maintenance X one level III STEMI center X 1 year = \$200 annually thereafter.
- m) End-tidal carbon dioxide monitor - \$3,900 X one level III STEMI center = \$3,900 for the first year and \$1,500 for the annual upkeep and maintenance X one level III STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$6,900 for the first 3 year period and \$1,500 for the annual upkeep and maintenance X one level III STEMI center X 1 year = \$1,500 annually thereafter.
- n) Temperature control devices for patient and resuscitation fluids - \$270 pack of 10 (Bair Hugger Therapy) X 15 = \$4,050 X one level III STEMI center X 3 years = \$12,150 for the first 3 year period and \$270 pack of 10 (Bair Hugger Therapy) X 15 = \$4,050 X one level III STEMI center = \$4,050 annually thereafter.
- o) External pacemaker - \$10 per set for pacer electrodes average cost (this will be used with the cardiac defibrillator already accounted for in g above) X 30 = \$300 X one level III STEMI center X 3 years = \$900 for the first 3 year period and \$10 per set X 30 = \$300 X one level III STEMI center X 1 year = \$300 annually thereafter.
- p) Transvenous pacemaker - \$200 average cost of pacer wires and equipment X 30 = \$6,000 X one level III STEMI center X 3 years = \$18,000 + generator cost \$7,000 X 5 generators = \$35,000 for the first year + \$1,000 X 2 years (years 2 through 3) for maintenance and upkeep of generators for a total of \$37,000 for the generators and a total of \$55,000 for the first 3 year period and \$200 average cost X 30 = \$6,000 + \$1,000 for the maintenance and upkeep of the generator = \$7,000 X one level III STEMI center X 1 year = \$7,000 annually thereafter.
- q) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 100 patients = \$5,000 X one level III STEMI center X 3 years = \$15,000 for the first 3 year period and \$5,000 X one level III STEMI center X 1 year = \$5,000 annually thereafter.

**Total cost for resuscitation equipment for one level III STEMI center for the emergency room department for the first 3 year period - \$1,800 (letter a above) + \$18,750 (letter b above) + \$18,750 (letter c above) + \$41,140 (letter d above) + \$10,000 (letter e above) + \$37,500 (letter f above) + \$40,895 (letter g above) + \$270,000 (letter h above) + \$9,000 (letter i above) + \$11,250 (letter j above) + \$30,000 (letter k above) + \$1,600 (letter l above) + \$6,900 (letter m above) + \$12,150 (letter n above) + \$900 (letter o above) + \$55,000 (letter p above) + \$15,000 (letter q above) = \$580,635 for the first 3 year period.**

**Total cost for resuscitation equipment for one level III STEMI center for the emergency room department for annually thereafter - \$600 (letter a above) + \$6,250 (letter b above) + \$6,250 (letter c above) + \$13,600 (letter d above) + \$1,500 (letter e above) + \$12,500 (letter f**

above) + \$1,500 (letter g above) + \$90,000 (letter h above) + \$3,000 (letter i above) + \$3,750 (letter j above) + \$10,000 (letter k above) + \$200 (letter l above) + \$1,500 (letter m above) + \$4,050 (letter n above) + \$300 (letter o above) + \$7,000 (letter p above) + \$5,000 (letter q above) = \$167,000 for annually thereafter.

3) Resuscitation equipment for the intermediate care unit –

- a) Airway control and ventilation equipment including  
laryngoscopes, endotracheal tubes of all sizes - (laryngoscopes at least 2 X \$300 each = \$600 X one level III STEMI center X 3 years = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 25 = \$6,250 X one level III STEMI center X 3 years = \$18,750 for the first 3 year period) + (mechanical ventilator \$7000 X one level III STEMI center X 1 year (the first year) = \$7,000 + \$1,500 for annual upkeep and maintenance of ventilator X one level III STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$10,000) for a total of \$30,550 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level III STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 25 = \$6,250 X one level III STEMI center X 1 year = \$6,250) + (mechanical ventilator \$1,500 annual upkeep and maintenance X one level III STEMI center X 1 year = \$1,500) for a total of \$8,350 annually thereafter.
- b) Bag-mask resuscitator and sources of oxygen - (bag mask resuscitator \$250 for a pack of 10 X 25 packs = \$6,250 X one level III STEMI center X 3 years = \$18,750 for the first 3 year period) + (air outlet \$70 X 7 = \$490 X one level III STEMI center X 1 year (the first year) = \$490 + \$150 for annual upkeep and maintenance X one level III STEMI center X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level III STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 250 patients = \$100 X one level III STEMI center X 3 years = \$300 for the first 3 year period) + (masks \$2.40 X 250 patients = \$600 X one level III STEMI centers X 3 years = \$1,800 for the first 3 year period) + (ambu bags \$10.50 X 50 = \$525 X one level III STEMI center X 3 years = \$1,575 for the first 3 year period) + (oxygen tank \$70 X 150 = \$10,500 X one level III STEMI center X 3 years = \$31,500 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level III STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X one level III STEMI center X 3 years = \$300 for the first 3 year period) for a total of \$59,890 for the first 3 year period and (bag mask resuscitator \$250 for a pack of 10 X 25 packs = \$6,250 X one level III STEMI center X 1 year = \$6,250) + (air outlet \$150 for annual upkeep and maintenance X one level III STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level III STEMI

- centers X 1 year = \$875) + (nasal cannula \$.40 X 250 patients = \$100 X one level III STEMI center X 1 year = \$100) + (masks \$2.40 X 250 patients = \$600 X one level III STEMI center X 1 year = \$600) + (ambu bags \$10.50 X 50 = \$525 X one level III STEMI center X 1 year = \$525) + (oxygen tank \$70 X 150 = \$10,500 X one level III STEMI center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 25 = \$750 X one level III STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X one level III STEMI center X 1 year = \$100) for a total of \$19,850 annually thereafter.
- c) Suction devices- suction devices canisters and tubing for wall suction \$50 X 250 patients = \$12,500 X one level III STEMI center X 3 years = \$37,500 for the first 3 year period and \$12,500 X one level III STEMI center = \$12,500 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry \$800 X 250 patients = \$200,000 X one level III STEMI center X 3 years = \$600,000 for the first 3 year period) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X one level III STEMI centers X 1 year (the first year) = \$37,895 + \$1,500 for annual upkeep and maintenance X one level III STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period) for a total of \$640,895 for the first 3 year period and (telemetry \$800 X 250 patients = \$200,000 X one level III STEMI center X 1 year = \$200,000) + (\$1,500 for annual upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level III STEMI center X 1 year = \$1,500) for a total of \$201,500 annually thereafter.
- e) All standard intravenous fluids and administration devices and intravenous catheters - (\$4.00 each for standard intravenous fluids X 250 patients = \$1,000 X one level III STEMI center X 3 years = \$3,000 for the first 3 year period) + (\$4.00 each for standard administration devices X 250 patients = \$1,000 X one level III STEMI center X 3 years = \$3,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 250 patients = \$1,000 X one level III STEMI center X 3 years = \$3,000 for the first 3 year period) for a total of \$9,000 for the first 3 year period (\$4.00 each for standard intravenous fluids X 250 patients = \$1,000 X one level III STEMI center X 1 year = \$1,000) + (\$4.00 each for standard administration devices X 250 patients = \$1,000 X one level III STEMI center X 1 year = \$1,000) + (\$4.00 each for standard intravenous catheters X 250 patients = \$1,000 X one level III STEMI center X 1 year = \$1,000) for a total of \$3,000 annually thereafter.
- f) Drugs and supplies necessary for emergency care- e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 100 patients = \$10,000 X one level III STEMI center X 3 years = \$30,000 for the first 3 year period and \$10,000 X one level III STEMI center X 1 year = \$10,000 annually thereafter.

- g) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries)  $\$50 \times 100 \text{ patients} = \$5,000 \times \text{one level III STEMI center} \times 3 \text{ years} = \$15,000$  for the first 3 year period and  $\$5,000 \times \text{one level III STEMI center} \times 1 \text{ year} = \$5,000$  annually thereafter.

Total cost for resuscitation equipment for one level III STEMI center for the intermediate care unit for the first 3 year period -  $\$30,550$  (letter a above) +  $\$59,890$  (letter b above) +  $\$37,500$  (letter c above) +  $\$640,895$  (letter d above) +  $\$9,000$  (letter e above) +  $\$30,000$  (letter f above) +  $\$15,000$  (letter g above) =  $\$822,835$  for the first 3 year period.

Total cost for resuscitation equipment for one level III STEMI center for the intermediate care unit for annually thereafter -  $\$8,350$  (letter a above) +  $\$19,850$  (letter b above) +  $\$12,500$  (letter c above) +  $\$201,500$  (letter d above) +  $\$3,000$  (letter e above) +  $\$10,000$  (letter f above) +  $\$5,000$  (letter g above) =  $\$260,200$  for annually thereafter.

- 4) Resuscitation equipment for the radiology department -
- a) Laryngoscopes - at least 2  $\times$   $\$300$  each =  $\$600 \times \text{one level III STEMI center} \times 3 \text{ years} = \$1,800$  for the first 3 year period and at least 2  $\times$   $\$300$  each =  $\$600 \times \text{one level III STEMI center} \times 1 \text{ year} = \$600$  annually thereafter.
  - b) Endotracheal tubes of all sizes -  $\$250$  for a pack of 10  $\times$  25 =  $\$6,250 \times \text{one level III STEMI center} \times 3 \text{ years} = \$18,750$  for the first 3 year period and  $\$250$  for a pack of 10  $\times$  25  $\times$  one level III STEMI center  $\times$  1 year =  $\$6,250$  annually thereafter.
  - c) Bag-mask resuscitator -  $\$250$  for a pack of 10  $\times$  25 packs =  $\$6,250 \times \text{one level III STEMI center} \times 3 \text{ years} = \$18,750$  for the first 3 year period and  $\$250$  for a pack of 10  $\times$  25 packs  $\times$  one level III STEMI center =  $\$6,250$  annually thereafter.
  - d) Sources of oxygen - (air outlet  $\$70 \times 7 = \$490 \times \text{one level III STEMI center} \times 1 \text{ year}$  (the first year) =  $\$490$  for the first year +  $\$150$  annual upkeep and maintenance  $\times$  one level III STEMI center  $\times$  2 years (years 2 through 3) =  $\$300$  for a total of  $\$790$  for the first 3 year period) + (regulator for air outlet  $\$35 \times 25 = \$875 \times \text{one level III STEMI center} \times 3 \text{ years} = \$2,625$  for the first 3 year period) + (nasal cannula  $\$.40 \times 250 \text{ patients} = \$100 \times \text{one level III STEMI center} \times 3 \text{ years} = \$300$  for the first 3 year period) + (masks  $\$2.40 \times 250 \text{ patients} = \$600 \times \text{one level III STEMI center} \times 3 \text{ years} = \$1,800$  for the first 3 year period) + (ambu bags  $\$10.50 \times 50 = \$525 \times \text{one level III STEMI center} \times 3 \text{ years} = \$1,575$  for the first 3 year period) + (oxygen tank  $\$70 \times 150 = \$10,500 \times \text{one level III STEMI center} \times 3 \text{ years} = \$31,500$  for the first 3 year period) + (regulator for oxygen tank  $\$30 \times 25 = \$750 \times \text{one level$

III STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X one level III STEMI center X 3 years = \$300 for the first 3 year period) for a total of \$41,140 for the first 3 year period and (air outlet \$70 X 7 = \$490 X one level III STEMI center X 1 year = \$490) + (regulator for air outlet \$35 X 25 = \$875 X one level III STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 250 patients = \$100 X one level III STEMI center X 1 year = \$100) + (masks \$2.40 X 250 patients = \$600 X one level III STEMI center X 1 year = \$600) + (ambu bags \$10.50 X 50 = \$525 X one level III STEMI center X 1 year = \$525) + (oxygen tank \$70 X 150 = \$10,500 X one level III STEMI center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 25 = \$750 X one level III STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X one level III STEMI center X 1 year = \$100) for a total of \$13,940 for annually thereafter.

- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 250 patients = \$12,500 X one level III STEMI center X 3 years = \$37,500 for the first 3 year period and \$50 X 250 X one level III STEMI center X one year = \$12,500 annually thereafter.
- f) Telemetry - average of \$800 X 250 patients = \$200,000 X one level III STEMI center X 3 years = \$600,000 for the first 3 year period and \$800 X 250 patients X one level III STEMI center X 1 year = \$200,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level III STEMI center = \$37,895 X 1 year (first year) = \$37,895 for the first year + \$1,500 for the annual upkeep and maintenance X one level III STEMI centers X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for the annual upkeep and maintenance X one level III STEMI center X 1 year = \$1,500 for annually thereafter.
- h) All standard administration devices - \$4.00 each X 250 patients = \$1,000 X one level III STEMI center X 3 years = \$3,000 for the first 3 year period and \$1,000 X one level III STEMI center X 1 year = \$1,000 annually thereafter.
- i) All standard intravenous catheters - \$4.00 each X 250 patients = \$1,000 X one level III STEMI center X 3 years = \$3,000 for the first 3 year period and \$1,000 X one level III STEMI center X 1 year = \$1,000 annually thereafter.
- j) All standard intravenous fluids - \$4.00 each X 250 patients = \$1,000 X one level III STEMI center X 3 years = \$3,000 for the first 3 year period and \$1,000 X one level III STEMI center X 1 year = \$1,000 annually thereafter.
- k) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 250 patients = \$25,000 X one level III STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level III STEMI center X 1 year = \$25,000 annually thereafter.



- l) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries)  
 $\$50 \times 250 \text{ patients} = \$12,500 \times \text{one level III STEMI center} \times 3 \text{ years} = \$37,500 \text{ for the first 3 year period and } \$12,500 \times \text{one level III STEMI center} \times 1 \text{ year} = \$12,500 \text{ annually thereafter.}$

Total cost for resuscitation equipment for one level III STEMI center for the radiology department for the first 3 year period -  $\$1,800 \text{ (letter a above)} + \$18,750 \text{ (letter b above)} + \$18,750 \text{ (letter c above)} + \$41,140 \text{ (letter d above)} + \$37,500 \text{ (letter e above)} + \$600,000 \text{ (letter f above)} + \$40,895 \text{ (letter g above)} + \$3,000 \text{ (letter h above)} + \$3,000 \text{ (letter i above)} + \$3,000 \text{ (letter j above)} + \$75,000 \text{ (letter k above)} + \$37,500 \text{ (letter l above)} = \$880,335 \text{ for the first 3 year period.}$

Total cost for resuscitation equipment for one level III STEMI center for the radiology department for annually thereafter -  $\$600 \text{ (letter a above)} + \$6,250 \text{ (letter b above)} + \$6,250 \text{ (letter c above)} + \$13,940 \text{ (letter d above)} + \$12,500 \text{ (letter e above)} + \$200,000 \text{ (letter f above)} + \$1,500 \text{ (letter g above)} + \$1,000 \text{ (letter h above)} + \$1,000 \text{ (letter i above)} + \$1,000 \text{ (letter j above)} + \$25,000 \text{ (letter k above)} + \$12,500 \text{ (letter l above)} = \$281,540 \text{ for annually thereafter.}$

- 5) Monitoring equipment to fully support the STEMI patient during the time the patient is physically present in the radiology department and during transportation to and from the radiology department -  $(\$1,800 \text{ each} \times 4 \text{ machines} = \$7,200 \times \text{one level III STEMI center} \times 1 \text{ year (the first year)} = \$7,200) + (\$150 \text{ for upkeep and maintenance} \times 4 \text{ machines} \times 2 \text{ years (years 2 through 3)} \times \text{one level III STEMI center} = \$1,200) \text{ for a total of } \$8,400 \text{ for the first 3 year period and } \$150 \times 4 \text{ machines} \times \text{one year} \times \text{one level III STEMI center} = \$600 \text{ annually thereafter.}$
- 6) X-ray capability -  $(\$150,000 \times 1 \text{ machine} = \$150,000 \times \text{one level III STEMI center} \times 1 \text{ year (the first year)} = \$150,000) + (\$500 \text{ for upkeep and maintenance} \times 1 \text{ machine} \times 2 \text{ years (years 2 through 3)} \times \text{one level III STEMI center} = \$1,000) \text{ for a total of } \$151,000 \text{ for the first 3 year period and } \$500 \text{ for upkeep and maintenance} \times 1 \text{ machine} \times 1 \text{ year} \times \text{one level III STEMI center} = \$500 \text{ annually thereafter.}$
- 7) Laboratory Services -
- a) Standard analyses of blood, urine and other body fluids - costs of materials  $\$200 \times 250 \text{ patients} = \$50,000 \times \text{one level III STEMI center} \times 3 \text{ years} = \$150,000 \text{ for the first 3 year period and } \$200 \times 250 \text{ patients} \times \text{one level III STEMI center} \times 1 \text{ year} = \$50,000 \text{ annually thereafter.}$
- b) Blood typing and cross matching - centrifuge  $\$2000 \times \text{one level III STEMI center} \times 1 \text{ year (the first year)} = \$2,000 + \$250 \text{ for the annual upkeep and maintenance of the centrifuge} \times \text{one level III STEMI center} \times 2 \text{ years (years 2 through 3)} = \$500 \text{ for a total of}$



- \$2,500 for the first 3 year period and \$250 for the annual upkeep and maintenance of the centrifuge X one level III STEMI center X 1 year = \$250 annually thereafter.
- c) Coagulation studies - \$200 materials X 125 patients = \$25,000 X one level III STEMI center X 3 years = \$75,000 for the first 3 year period and \$200 materials X 125 patients = \$25,000 X one level III STEMI center X 1 year = \$25,000 annually thereafter.
  - d) Blood bank or access to a community central blood bank and adequate hospital blood storage facilities - at the least blood storage refrigerators 1 large refrigerator / use of community central blood bank at \$15,000 X one level III STEMI center X 1 year (the first year) = \$15,000 + \$1,500 for the annual upkeep and maintenance of the blood storage refrigerator X one level III STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$18,000 for the first 3 year period and \$1,500 for the annual upkeep and maintenance of the blood storage refrigerator X one level III STEMI center X 1 year = \$1,500 annually thereafter.
  - e) Blood gases and pH determinations- at least 1 blood gas analyzer and kit \$3000 X one level III STEMI center X 3 years = \$9,000 for the first 3 year period and \$3,000 X one level III STEMI center X 1 year = \$3,000 annually thereafter.
  - f) Blood chemistries- test and kits average of \$350 X 50 patients = \$17,500 X one level III STEMI center X 3 years = \$52,500 for the first 3 year period and \$350 X 50 patients X one level III STEMI center X 1 year = \$17,500 annually thereafter.

Total cost for laboratory services for one level III STEMI center for the first 3 year period - \$150,000 (letter a above) + \$2,500 (letter b above) + \$75,000 (letter c above) + \$18,000 (letter d above) + \$9,000 (letter e above) + \$52,500 (letter f above) = \$307,000 for the first 3 year period.

Total cost for laboratory services for one level III STEMI center for annually thereafter - \$50,000 (letter a above) + \$250 (letter b above) + \$25,000 (letter c above) + \$1,500 (letter d above) + \$3,000 (letter e above) + \$17,500 (letter f above) = \$97,250 for annually thereafter.

Total cost for medical equipment for one level III STEMI center for the first 3 year period - \$3,600 (number 1 above) + \$580,635 (number 2 above) + \$822,835 (number 3 above) + \$880,335 (number 4 above) + \$8,400 (number 5 above) + \$151,000 (number 6 above) + \$307,000 (number 7 above) = \$2,753,805 for the first 3 year period.

Total cost for medical equipment for one level III STEMI center for annually thereafter - \$1,200 (number 1 above) + \$167,000 (number 2 above) + \$260,200 (number 3 above) + \$281,540 (number 4 above) + \$600 (number 5 above) + \$500 (number 6 above) + \$97,250 (number 7 above) = \$808,290 for annually thereafter.

**D) The STEMI center shall have support services to assist the STEMI patient's family from the time of entry into the facility to the time of discharge or transfer - 1 full time equivalent medical social worker \$66,000 annually X 3 years X one level III STEMI center = \$198,000 for the first 3 year period and \$66,000 X one level III STEMI center X 1 year = \$66,000 annually thereafter.**

**E) The STEMI center shall have cardiac rehabilitation or a written network agreement for the provision of cardiac rehabilitation – at least 2 registered nurses X \$67,623 annually X one level I STEMI center X 3 years = \$405,738 for the first 3 year period and \$67,623 X 2 registered nurses X one level I STEMI center X 1 year = \$135,246 annually thereafter.**

**F) Courses/conferences for the STEMI medical director who is not board certified/board eligible shall attend one national, regional or state meeting every 3 years in cardiovascular disease.**

- a) National or international STEMI course or conference - (\$1200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level III STEMI centers X 3 years = \$0 for the first 3 year period and \$2,950 X no level III STEMI centers X 1 year = \$0 for annually thereafter.**
- b) Regional STEMI course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level III STEMI center = \$1,750 for the first 3 year period and \$1,750 X one level III STEMI center X 1 year = \$1,750 for annually thereafter.**
- c) State STEMI course or conference (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level III STEMI centers X 3 years = \$0 for the first 3 year period and \$1,150 X no level III STEMI centers X 1 year = \$0 for annually thereafter.**

**G) STEMI registry**

- a) Computer with internet capability/access \$600 computer + internet fee \$100/month \$1200 annually X 3 years X one level III STEMI center = \$5,400 for the first 3 year period and \$1,800 X one level III STEMI center X 1 year = \$1,800 annually thereafter.**
- b) Patient registrar - \$36,258 annually X 3 years X one level III STEMI center = \$108,774 for the first 3 year period and \$36,258 X one level III STEMI center X 1 year = \$36,258 annually thereafter.**
- c) Training to set up STEMI registry system/program for data entry - \$200 annually X 3 years X one level III STEMI center = \$600 for the first 3 year period and \$200 X one level III STEMI center X 1 year = \$200 annually thereafter.**

**H) Public education program to promote STEMI prevention and STEMI symptoms awareness - e.g. community health fairs costs of printing and advertisement costs (posters, brochures etc...) \$350 for each health fair x 12 health fairs annually = \$4200 annually X 3 years X one level III STEMI**

center = \$12,600 for the first 3 year period and \$4,200 X one level III STEMI centers X 1 year = \$4,200 annually thereafter.

- I) Patient education program to promote STEMI prevention and STEMI symptoms awareness - printing costs of brochures etc... \$500 annually X 3 years X one level III STEMI center = \$1,500 for the first 3 year period and \$500 X one level III STEMI center X 1 year = \$500 annually thereafter.
- J) Professional education outreach program in catchment areas to provide training and other supports to improve care of STEMI patients - e.g. hospitals sponsor at least 1 conference per year within their service area at the cost of \$2000 annually X 3 years X one level III STEMI center = \$6,000 for the first 3 year period and \$2,000 X one level III STEMI center X 1 year = \$2,000 annually thereafter.
- K) STEMI centers shall be actively involved in local and regional EMS systems by providing training and clinical educational resources- e.g. hospitals sponsor at least 1 conference per year within their area for EMS at the cost of \$2000 annually X 3 years X one level III STEMI center = \$6,000 for the first 3 year period and \$2,000 X one level III STEMI center X 1 year = \$2,000 annually thereafter.
- L) A lighted designated helicopter landing area at the STEMI center to accommodate incoming medical helicopters which shall be cordoned off at all times from the general public. The STEMI center shall also have a landing area on the hospital premises no more than three (3) minutes from the emergency room - (construction of helipad estimate of \$36,000 X 1 helipad X one level III STEMI centers X 1 year (the first year) = \$36,000) + (maintenance and upkeep of helipad \$2,000 X 2 years (years 2 through 3) X one level III STEMI center = \$4,000) for a total of \$40,000 for the first 3 year period for the helipad + (cordoning barrier \$4,300 X 1 year (the first year) X one level III STEMI center = \$4,300) + \$500 for maintenance and upkeep of the cordoning barrier X 2 years (years 2 through 3) X one level III STEMI centers = \$1,000) for a total of \$5,300 for the first 3 year period for the cordoning barrier for a total of \$45,300 for the first 3 year period and \$500 for maintenance and upkeep of the cordoning barrier X 1 year X one level III STEMI center = \$500 + \$500 for maintenance and upkeep of helipad X 1 year X one level III STEMI center = \$500 for a total of \$1,000 annually thereafter.

Total cost for one level III STEMI center for the first 3 year period -  
 [\$14,931,192 letter A above] + [\$237,569.67 letter B above] + [\$2,753,805 letter C above] + [\$198,000 letter D above] + [\$405,738 letter E above] +  
 [\$1,750 letter F above] + [\$114,774 letter G above] + [\$12,600 letter H above] +  
 [\$1,500 letter I above] + [\$6,000 letter J above] + [\$6,000 letter K above] +  
 [\$45,300 letter L above] = \$18,714,228 for the first 3 year period.

Total cost for one level III STEMI center for annually thereafter -  
 [\$4,977,064 letter A above] + [\$79,189.89 letter B above] + [\$808,290 letter C above] +  
 [\$66,000 letter D above] + [\$135,246 letter E above] + [\$1,750 letter

F above] + [\$38,258 letter G above] + [\$4,200 letter H above] + [\$500 letter I above] + [\$2,000 letter J above] + [\$2,000 letter K above] + [\$1,000 letter L above] = \$6,115,497.80 for annually thereafter.

It is expected that four level III STEMI centers will be designated during the first 3 year period (\$74,856,912) and those same level III STEMI centers will be designated again at some time (3 year intervals) annually thereafter (\$24,461,991.20).

**4. Level IV STEMI centers.**

**A. Salary costs for medical professionals.**

- 1) A physician experienced in diagnosing and treating cardiovascular disease and STEMI - \$204,430 annually X one level IV STEMI center = \$204,430 X 3 years = \$613,290 for the first 3 year period and \$204,430 annually X one level IV STEMI center X 1 year = \$204,430 annually thereafter.
- 2) At least 1 other health care professional or qualified individual credentialed in STEMI care - \$126,046 annually X one level IV STEMI center = \$126,046 X 3 years = \$378,138 for the first 3 year period and \$126,046 annually X one level IV STEMI center X 1 year = \$126,046 annually thereafter.
- 3) STEMI center medical director who is recommended to be a board certified or board admissible physician - \$204,430 annually X 3 years X one level IV STEMI center = \$613,290 for the first 3 year period and \$204,430 annually X one level IV STEMI center X 1 year = \$204,430 annually thereafter.
- 4) STEMI program manager/coordinator who is a registered nurse, other clinical staff or a qualified individual - \$126,046 annually X one level IV STEMI center = \$126,046 X 3 years = \$378,138 for the first 3 year period and \$126,046 annually X one level IV STEMI center X 1 year = \$126,046 annually thereafter.
- 5) A diagnostic radiologist - \$402,539 annually X one level IV STEMI center = \$402,539 X 3 years = \$1,207,617 for the first 3 year period and \$402,539 annually X one level IV STEMI center X 1 year = \$402,539 annually thereafter.
- 6) Emergency department physician credentialed for STEMI care by the STEMI center 24 hours a day, 7 days a week - \$244,973 annually X 3 emergency department physicians X one level IV STEMI center = \$734,919 X 3 years = \$2,204,757 for the first 3 year period and \$244,973 annually X 3 physicians X one level IV STEMI center X 1 year = \$734,919 annually thereafter.
- 7) Registered nurses in the emergency department - \$64,533 annually X 5 registered nurses in the emergency department = \$322,665 X one level IV STEMI center = \$322,665 X 3 years = \$967,995 for the first 3 year period and \$322,665 X one level IV STEMI center X 1 year = \$322,665 annually thereafter.
- 8) Medical director of the emergency department - \$199,038 annually X one level IV STEMI center = \$199,038 X 3 years = \$597,114 for the first 3 year period and \$199,038 X one level IV STEMI center X 1 year = \$199,038 annually thereafter.

- 9) Radiologist - average \$300,000 annually X 3 neurologist/radiologists = \$900,000 X one level IV STEMI center = \$900,000 X 3 years = \$2,700,000 for the first 3 year period and \$300,000 X 3 neurologists/radiologists = \$900,000 annually X one level IV STEMI center X 1 year = \$900,000 annually thereafter.
- 10) Transport nurse - average \$62,000 annually X one level IV STEMI center = \$62,000 X 4 transport nurses = \$248,000 X 3 years = \$744,000 for the first 3 year period and \$62,000 annually X 4 transport nurses X one level IV STEMI center X 1 year = \$248,000 annually thereafter.
- 11) Radiology technician - average \$62,000 annually X 4 radiology technicians = \$248,000 X one level IV STEMI center = \$248,000 X 3 years = \$744,000 for the first 3 year period and \$62,000 annually X 4 radiology technicians X one level IV STEMI center X one year = \$248,000 annually thereafter.
- 12) Nurse educator/supervisor to ensure staff are trained on core competencies - \$78,500 annually X one level IV STEMI center = \$78,500 X 3 years = \$235,500 for the first 3 year period and \$78,500 annually X one level IV STEMI center X 1 year = \$78,500 annually thereafter.

Total cost for salaries of medical professionals for one level IV STEMI center for the first 3 year period - \$613,290 (#1 above) + \$378,138 (#2 above) + \$613,290 (#3 above) + \$378,138 (#4 above) + \$1,207,617 (#5 above) + \$2,204,757 (#6 above) + \$967,995 (#7 above) + \$597,114 (#8 above) + \$2,700,000 (#9 above) + \$744,000 (#10 above) + \$744,000 (#11 above) + \$235,500 (#12 above) = \$11,383,839 for the first 3 year period.

Total cost for salaries of medical professionals for one level IV STEMI center for annually thereafter - \$204,430 (#1 above) + \$126,046 (#2 above) + \$204,430 (#3 above) + \$126,046 (#4 above) + \$402,539 (#5 above) + \$734,919 (#6 above) + \$322,665 (#7 above) + \$199,038 (#8 above) + \$900,000 (#9 above) + \$248,000 (#10 above) + \$248,000 (#11 above) + \$78,500 (#12 above) = \$3,794,613 for annually thereafter.

**B.) Continuing education for STEMI center medical staff.**

- 1) Level IV STEMI center call roster member (emergency department physician) shall complete a minimum average of 8 hours of continuing education in cardiovascular disease every 2 years - average of \$10.00 per hour for online training X 4 hours X 3 years X one level IV STEMI center = \$120 for the first 3 year period and \$10 X 4 hours X one level IV STEMI center X 1 year = \$40 annually thereafter.
- 2) Level IV STEMI center call roster member (others as appropriate) shall complete a minimum average of 8 hours of continuing education in cardiovascular disease every 2 years - average of \$10.00 per hour for online training X 4 hours X 3 years X one level IV STEMI center

- = \$120 X 2 others as appropriate = \$240 for the first 3 year period and \$10 per hour for online training X 4 hours X one level IV STEMI centers X 1 year X 2 others as appropriate = \$80 annually thereafter.
- 3) A level IV STEMI center medical director shall complete a minimum of 10 hours of continuing medical education every 2 years in the area of acute coronary syndrome - average of \$10.00 per hour for online training X 5 hours X 3 years X one level IV STEMI center = \$150 for the first 3 year period and \$10 per hour for online training X 5 hours X one level IV STEMI center X 1 year = \$50 annually thereafter.
  - 4) A level IV program manager/coordinator shall complete a minimum of 8 hours of continuing education every 2 years in cardiovascular disease - average of \$39.99 annually for online training X 3 years X one level IV STEMI center = \$119.97 for the first 3 year period and \$39.99 X one level IV STEMI center X 1 year = \$39.99 annually thereafter.
  - 5) Emergency department physicians in level IV STEMI centers shall complete a minimum average of 6 hours of continuing medical education in cardiovascular disease every 2 years - average of \$10.00 per hour for online training X 3 emergency department physicians X 3 hours of continuing medical education X 3 years X one level IV STEMI center = \$270 for the first 3 year period and \$10.00 per hour for online training X 3 emergency department physicians X 3 hours of continuing medical education X one level IV STEMI center X 1 year = \$90 annually thereafter.
  - 6) Registered nurses assigned to the emergency departments in level IV STEMI centers shall complete a minimum of 6 hours of continuing education in the area of cardiovascular disease every 2 years - average of \$39.99 annually for online training X 5 registered nurses in the emergency department X 3 years X one level IV STEMI center = \$599.85 for the first 3 year period and \$39.99 annually for online training X 5 registered nurses in the emergency department X one level IV STEMI center X 1 year = \$199.95.

Total cost for continuing education for medical staff for one level IV STEMI center for the first 3 year period - \$120 (#1 above) + \$240 (#2 above) + \$150 (#3 above) + \$119.97 (#4 above) + \$270 (#5 above) + \$599.85 (#6 above) = \$1,499.82 for the first 3 year period.

Total cost for continuing education for medical staff for one level IV STEMI center for annually thereafter - \$40 (#1 above) + \$80 (#2 above) + \$50 (#3 above) + \$39.99 (#4 above) + \$90 (#5 above) + \$199.95 (#6 above) = \$499.94 for annually thereafter.

#### **C.) Medical Equipment.**

- 1) Electronic communication devices for STEMI call roster members - 2 electronic communication devices (cell phone and beeper/pager) X \$300 for the annual cost of each electronic communication device X 2 STEMI call roster members carrying this device ( 1 member on call

and 1 back-up member) X 3 years X one level IV STEMI center = \$3,600 for the first 3 year period and 2 electronic communication devices (cell phone and beeper/pager) X \$300 for the annual cost of each electronic communication device X 2 STEMI call roster members carrying this device (1 member on call and 1 back-up member) X one level IV STEMI center X 1 year = \$1,200 annually thereafter.

**2) Resuscitation equipment for the emergency department -**

- a) Laryngoscopes - at least 2 X \$300 each = \$600 X 3 years X one level IV STEMI center = \$1,800 for the first 3 year period and at least 2 X \$300 each X one level IV STEMI centers X 1 year = \$600 annually thereafter.
- b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 25 packs X 3 years X one level IV STEMI center = \$18,750 for the first 3 year period and \$250 for a pack of 10 X 25 packs X one level IV STEMI center X 1 year = \$6,250 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 25 packs X 3 years X one level IV STEMI center = \$18,750 for the first 3 year period and \$250 for a pack of 10 X 25 packs X one level IV STEMI center = \$6,250 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level IV STEMI center for the first year = \$490 + \$150 upkeep and maintenance of air outlet X 2 years X one level IV STEMI center = \$300 for a total of \$790 for air outlets for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X 3 years X one level IV STEMI center = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 250 patients = \$100 X 3 years X one level IV STEMI center = \$300 for the first 3 year period) + (masks \$2.40 X 250 patients = \$600 X 3 years X one level IV STEMI center = \$1,800 for the first 3 year period) + (ambu bags \$10.50 X 50 = \$525 X 3 years X one level IV STEMI center = \$1,575 for the first 3 year period) + (oxygen tank \$70 X 150 = \$10,500 X 3 years X one level IV STEMI center = \$31,500 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 3 years X one level IV STEMI center = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X 3 years X one level IV STEMI center = \$300 for the first 3 year period) for a total of \$41,140 for the first 3 year period and (air outlet upkeep and maintenance \$150 X one level IV STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level IV STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 250 patients = \$100 X one level IV STEMI center X 1 year = \$100) + (masks \$2.40 X 250 = \$600 X one level IV STEMI center X 1 year = \$600) + (ambu bags \$10.50 X 50 = \$525 X one level IV STEMI center X 1 year = \$525) + (oxygen tank \$70 X 150 = \$10,500 X one level IV STEMI center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 25 = \$750 X one level IV STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X one level IV



- STEMI center X 1 year = \$100) for a total of \$13,600 annually thereafter.
- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 250 patients = \$12,500 X 3 years X one level IV STEMI center = \$37,500 for the first 3 year period and \$50 X 250 patients X one level IV STEMI centers X 1 year = \$12,500 annually thereafter.
- f) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level IV STEMI center = \$37,895 for the first year + \$1,500 for upkeep and maintenance X 2 years (years 2 through 3) X one level IV STEMI center = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for the annual upkeep, maintenance and possible replacement X one level IV STEMI center X 1 year = \$1,500 annually thereafter.
- g) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 250 patients = \$1,000) + (\$4.00 each for standard administration devices X 250 patients = \$1,000) + (\$4.00 each for standard intravenous catheters X 250 patients = \$1,000) = \$3,000 X 3 years X one level IV STEMI center = \$9,000 for the first 3 year period and \$3,000 X one level IV STEMI center X 1 year = \$3,000 annually thereafter.
- h) Intraosseous devices - needles \$25 each X 150 patients = \$3,750 X 3 years X one level IV STEMI center = \$11,250 for the first 3 year period and \$25 each X 150 patients = \$3,750 X one level IV STEMI center X 1 year = \$3,750 annually thereafter.
- i) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 250 patients = \$25,000 X 3 years X one level IV STEMI center = \$75,000 for the first 3 year period and \$100 X 250 patients X one level IV STEMI center X 1 year = \$25,000 annually thereafter.
- j) Two-way communication link with emergency medical service vehicles - \$1,200 apiece X 1 vehicle = \$1,200 X one level IV STEMI center X 1 year (the first year) = \$1,200 + \$150 for upkeep and maintenance X 2 years (years 2 through 3) X one level IV STEMI center = \$300 for a total of \$1,500 for the first 3 year period and \$150 X one level IV STEMI center X 1 year = \$150 annually thereafter.
- k) End-tidal carbon dioxide monitor - \$3,900 X one level IV STEMI centers X 1 year (the first year) = \$3,900 + \$1,500 for the annual upkeep and maintenance X one level IV STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$6,900 for the first 3 year period and \$1,500 X one level IV STEMI centers X 1 year = \$1,500 annually thereafter.
- l) Temperature control devices for patient and resuscitation fluids \$270 pack of 10 (Bair Hugger Therapy) X 15 = \$4,050 X 3 years X one level IV STEMI center = \$12,150 for the first 3 year period and \$270 pack of 10 (Bair Hugger Therapy) X 15 = \$4,050 X one level IV STEMI center X 1 year = \$4,050 annually thereafter.



m) External pacemaker - \$10 per set for pacer electrodes average cost (this will be used with the cardiac defibrillator already accounted for in f above) X 15 = \$150 X one level IV STEMI center X 3 years = \$450 for the first 3 year period and \$10 per set X 15 = \$150 X one level IV STEMI center X 1 year = \$150 annually thereafter.

Total cost for resuscitation equipment for the emergency department for one level IV STEMI center for the first 3 year period - \$1,800 (letter a above) + \$18,750 (letter b above) + \$18,750 (letter c above) + \$41,140 (letter d above) + \$37,500 (letter e above) + \$40,895 (letter f above) + \$9,000 (letter g above) + \$11,250 (letter h above) + \$75,000 (letter i above) + \$1,500 (letter j above) + \$6,900 (letter k above) + \$12,150 (letter l above) + \$450 (letter m above) = \$275,085 for the first 3 year period.

Total cost for resuscitation equipment for the emergency department for one level IV STEMI center for annually thereafter - \$600 (letter a above) + \$6,250 (letter b above) + \$6,250 (letter c above) + \$13,600 (letter d above) + \$12,500 (letter e above) + \$1,500 (letter f above) + \$3,000 (letter g above) + \$3,750 (letter h above) + \$25,000 (letter i above) + \$150 (letter j above) + \$1,500 (letter k above) + \$4,050 (letter l above) + \$150 (letter m above) = \$78,300 annually thereafter.

- 3) Resuscitation equipment for the radiology department -
  - a) Laryngoscopes- at least 2 X \$300 each = \$600 X one level IV STEMI center X 3 years = \$1,800 for the first 3 year period and at least 2 X \$300 each = \$600 X one level IV STEMI center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 25 = \$6,250 X one level IV STEMI center X 3 years = \$18,750 for the first 3 year period and \$250 for a pack of 10 X 25 X one level IV STEMI center X 1 year - \$6,250 annually thereafter.
  - c) Bag-mask resuscitator - \$250 for a pack of 10 X 25 packs = \$6,250 X one level IV STEMI center X 3 years = \$18,750 for the first 3 year period and \$250 for a pack of 10 X 25 packs X one level IV STEMI center X 1 year = \$6,250 annually thereafter.
  - d) Sources of oxygen – (air outlets \$70 X 7 = \$490 X one level IV STEMI center X 1 year (the first year) = \$490 for the first year + \$150 annual upkeep and maintenance X one level IV STEMI centers X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 15 = \$525 X one level IV STEMI center X 3 years = \$1,575 for the first 3 year period) + (nasal cannula \$.40 X 250 patients = \$100 X one level IV STEMI center X 3 years = \$300 for the first 3 year period) + (masks \$2.40 X 250 patients = \$600 X one level IV STEMI center X 3 years = \$1,800 for the first 3 year period) + (ambu bags \$10.50 X 50 = \$525 X one level IV STEMI center X 3 years = \$1,575 for the first 3 year period) + (oxygen tank \$70 X 150 = \$10,500 X one

- level IV STEMI center X 3 years = \$31,500 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level IV STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X one level IV STEMI center X 3 years = \$300 for the first 3 year period) for a total of \$40,090 for the first 3 year period and (air outlets \$70 X 7 = \$490 X one level IV STEMI center X 1 year = \$490) + (regulator for air outlet \$35 X 15 = \$525 X one level IV STEMI center X 1 year = \$525) + (nasal cannula \$.40 X 250 patients = \$100 X one level IV STEMI center X 1 year = \$100) + (masks \$2.40 X 250 patients = \$600 X one level IV STEMI center X 1 year = \$600) + (ambu bags \$10.50 X 50 = \$525 X one level IV STEMI center X 1 year = \$525) + (oxygen tank \$70 X 150 = \$10,500 X one level IV STEMI center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 15 = \$450 X one level IV STEMI center X 1 year = \$450) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X one level IV STEMI center X 1 year = \$100) for a total of \$13,290 for annually thereafter.
- e) Suction devices – suction device canisters and tubing for wall suction \$50 X 250 patients = \$12,500 X one level IV STEMI center X 3 years = \$37,500 for the first 3 year period and \$50 X 250 X one level IV STEMI center X 1 year = \$12,500 annually thereafter.
- f) Telemetry – average of \$800 X 250 patients = \$200,000 X one level IV STEMI center X 3 years = \$600,000 for the first 3 year period and \$800 X 250 patients X one level IV STEMI center X 1 year = \$200,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level IV STEMI center = \$37,895 X 1 year (first year) = \$37,895 for the first year + \$1,500 for the annual upkeep and maintenance X one level IV STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for the annual upkeep and maintenance X one level IV STEMI center X 1 year = \$1,500 for annually thereafter.
- h) All standard administration devices - \$4.00 each X 250 patients = \$1,000 X one level IV STEMI center X 3 years = \$3,000 for the first 3 year period and \$1,000 X one level IV STEMI center X 1 year = \$1,000 annually thereafter.
- i) All standard intravenous catheters - \$4.00 each X 250 patients = \$1,000 X one level IV STEMI center X 3 years = \$3,000 for the first 3 year period and \$1,000 X one level IV STEMI center X 1 year = \$1,000 annually thereafter.
- j) Drugs necessary for emergency care – e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 250 patients = \$25,000 X one level IV STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level IV STEMI center X 1 year = \$25,000 annually thereafter.
- k) Supplies necessary for emergency care – (IV start pack, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries)

$\$50 \times 250 \text{ patients} = \$12,500 \times \text{one level IV STEMI center} \times 3 \text{ years} = \$37,500$  for the first 3 year period and  $\$12,500 \times \text{one level IV STEMI center} \times 1 \text{ year} = \$12,500$  annually thereafter.

Total cost for resuscitation equipment for one level IV STEMI center for the radiology department for the first 3 year period -  $\$1,800$  (letter a above) +  $\$18,750$  (letter b above) +  $\$18,750$  (letter c above) +  $\$40,090$  (letter d above) +  $\$37,500$  (letter e above) +  $\$600,000$  (letter f above) +  $\$40,895$  (letter g above) +  $\$3,000$  (letter h above) +  $\$3,000$  (letter i above) +  $\$75,000$  (letter j above) +  $\$37,500$  (letter k above) =  $\$876,285$  for the first 3 year period.

Total cost for resuscitation equipment for one level IV STEMI center for the radiology department for annually thereafter -  $\$600$  (letter a above) +  $\$6,250$  (letter b above) +  $\$6,250$  (letter c above) +  $\$13,290$  (letter d above) +  $\$12,500$  (letter e above) +  $\$200,000$  (letter f above) +  $\$1,500$  (letter g above) +  $\$1,000$  (letter h above) +  $\$1,000$  (letter i above) +  $\$25,000$  (letter j above) +  $\$12,500$  (letter k above) =  $\$279,890$  for annually thereafter.

- 4) Monitoring equipment to fully support the STEMI patient during the time the patient is physically present in the radiology department and during transportation to and from the radiology department –  $(\$1,800 \text{ each} \times 4 \text{ machines} = \$7,200 \times \text{one level IV STEMI center} \times 1 \text{ year (the first year)} = \$7,200) + (\$150 \text{ for upkeep and maintenance} \times 4 \text{ machines} \times 2 \text{ years (years 2 through 3)} \times \text{one level IV STEMI center} = \$1,200)$  for a total of  $\$8,400$  for the first 3 year period and  $\$150 \times 4 \text{ machines} \times 1 \text{ year} \times \text{one level IV STEMI center} = \$600$  annually thereafter.
- 5) X-ray capability –  $(\$150,000 \times 1 \text{ machine} = \$150,000 \times \text{one level IV STEMI center} \times 1 \text{ year (the first year)} = \$150,000) + \$500 \text{ for upkeep and maintenance} \times 1 \text{ machine} \times 2 \text{ years (years 2 through 3)} \times \text{one level IV STEMI center} = \$1,000)$  for a total of  $\$151,000$  for the first 3 year period and  $\$500 \text{ for upkeep and maintenance} \times 1 \text{ machine} \times 1 \text{ year} \times \text{one level IV STEMI center} = \$500$  annually thereafter.
- 6) Laboratory Services-
  - a) Standard analyses of blood, urine and other body fluids - costs of materials  $\$200 \times 250 \text{ patients} = \$50,000 \times 3 \text{ years} \times \text{one level IV STEMI center} = \$150,000$  for the first 3 year period and  $\$50,000 \times \text{one level IV STEMI center} \times 1 \text{ year} = \$50,000$  annually thereafter.
  - b) Coagulation studies -  $\$200 \text{ materials} \times 250 \text{ patients} = \$50,000 \times 3 \text{ years} \times \text{one level IV STEMI center} = \$150,000$  for the first 3 year period and  $\$50,000 \times \text{one level IV STEMI center} \times 1 \text{ year} = \$50,000$  annually thereafter.
  - c) Blood bank or access to a community central blood bank and adequate hospital blood storage facilities - at the least blood storage refrigerators 1 large refrigerator/use of community central blood bank at  $\$15,000 \times \text{one level IV STEMI center} \times 1 \text{ year}$

(the first year = \$15,000 for the first year + \$1,500 X 2 years  
(years 2 through 3) X one level IV STEMI center =  
\$3,000 for a total of \$18,000 for the first 3 year period and  
\$1,500 X one level IV STEMI center X one year = \$1,500  
annually thereafter.

d) Blood gases and pH determinations - at least 1 blood gas analyzer  
and kit \$3000 X 3 years X one level IV STEMI center =  
\$9,000 for the first 3 year period and \$3,000 X one level IV  
STEMI center X 1 year = \$3,000 annually thereafter.

e) Blood chemistries - test and kits average of \$350 X 100 patients =  
\$35,000 X 3 years X one level IV STEMI center = \$105,000 for  
the first 3 year period and \$35,000 X one level IV STEMI  
center X 1 year = \$35,000 annually thereafter.

**Total cost for laboratory services for one level IV STEMI center for the first  
3 year period - \$150,000 (letter a above) + \$150,000 (letter b above) +  
\$18,000 (letter c above) + \$9,000 (letter d above) + \$105,000 (letter e above) =  
\$432,000 for the first 3 year period.**

**Total cost for laboratory services for one level IV STEMI center for annually  
thereafter - \$50,000 (letter a above) + \$50,000 (letter b above) + \$1,500  
(letter c above) + \$3,000 (letter d above) + \$35,000 (letter e above) =  
\$139,500 for annually thereafter.**

**Total cost for medical equipment for one level IV STEMI center for the first  
3 year period - \$3,600 (number 1 above) + \$275,085 (number 2 above) +  
\$876,285 (number 3 above) + \$8,400 (number 4 above) + \$151,000 (number 5  
above) + \$432,000 (number 6 above) = \$1,746,370 for the first 3 year period.**

**Total cost for medical equipment for one level IV STEMI center for annually  
thereafter - \$1,200 (number 1 above) + \$78,300 (number 2 above) +  
\$279,890 (number 3 above) + \$600 (number 4 above) + \$500 (number 5  
above) + \$139,500 (number 6 above) = \$499,990 for annually thereafter.**

**D. The STEMI center shall have support services to assist the patient's  
family from time of entry into the facility to time of discharge - at least 1 full  
time equivalent medical social worker \$66,000 annually X 3 years X one  
level IV STEMI center = \$198,000 for the first 3 year period and  
\$66,000 X one level IV STEMI center X 1 year = \$66,000 annually  
thereafter.**

**E. Courses/conferences for STEMI medical directors who are not board  
certified-**

**1) National or international STEMI course or conference - (\$1200  
registration fee) + (hotel \$1000) + (food \$500) + (incidental  
expenses \$250) = \$2,950 X no level IV STEMI centers = \$0 for the  
first 3 year period and \$2,950 X no level IV STEMI centers X 1  
year = \$0 annually thereafter.**

- 2) Regional STEMI course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level IV STEMI center = \$1,750 for the first 3 year period and \$1,750 X one level IV STEMI center X 1 year = \$1,750 annually thereafter.
- 3) State STEMI course or conference (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level IV STEMI centers = \$0 for the first 3 year period and \$1,150 X no level IV STEMI centers X 1 year = \$0 annually thereafter.

**F. STEMI registry**

- a) Computer with internet capability/access \$600 computer + internet fee \$100/month \$1200 annually X 3 years X one level IV STEMI center = \$5,400 for the first 3 year period and \$1,800 X one level IV STEMI center X 1 year = \$1,800 annually thereafter.
- b) Patient registrar - \$36,258 annually X 3 years X one level IV STEMI center = \$108,774 for the first 3 year period and \$36,258 X one level IV STEMI center X 1 year = \$36,258 annually thereafter.
- c) Training to set up STEMI registry system/program for data entry- \$200 annually X 3 years X one level IV STEMI center = \$600 for the first 3 year period and \$200 X one level IV STEMI center X 1 year = \$200 annually thereafter.

**G. Public education program to promote STEMI prevention and STEMI symptoms awareness - e.g. community health fairs costs of printing and advertisement costs (posters, brochures etc...) \$350 for each health fair X 12 health fairs annually X 3 years = \$12,600 annually X one level IV STEMI center = \$12,600 for the first 3 year period and \$4,200 annually X one level IV STEMI center X 1 year = \$4,200 annually thereafter.**

**H. Patient education program to promote STEMI prevention and STEMI symptoms awareness - printing costs of brochures etc... \$500 annually X 3 years X one level IV STEMI center = \$1,500 for the first 3 year period and \$500 X one level IV STEMI center X 1 year = \$500 annually thereafter.**

**I. STEMI centers shall be actively involved in local and regional EMS systems by providing training and clinical educational resources - hospitals sponsor at least 1 conference per year within their area for EMS at the cost of \$2000 annually X 3 years X one level IV STEMI center = \$6,000 for the first 3 year period and \$2,000 X one level IV STEMI center X 1 year = \$2,000 annually thereafter.**

**J. A lighted designated helicopter landing area at the STEMI center to accommodate incoming medical helicopters which shall be cordoned off at all times from the general public. The STEMI center shall also have a landing area on the hospital premises no more than three (3) minutes from the emergency room - (construction of helipad estimate of \$36,000 X 1 helipad X one level IV STEMI center X 1 year (the first year) = \$36,000) + (maintenance and upkeep of helipad \$2,000 X 2 years (years 2**

through 3) X one level IV STEMI center = \$4,000) for a total of \$40,000 for the first 3 year period for the helipad + (cordoning barrier \$4,300 X 1 year (the first year) X one level IV STEMI center = \$4,300) + \$500 for maintenance and upkeep of the cordoning barrier X 2 years (years 2 through 3) X one level IV STEMI center = \$1,000) for a total of \$5,300 for the first 3 year period for the cordoning barrier for a total of \$45,300 for the first 3 year period and \$500 for maintenance and upkeep of the cordoning barrier X 1 year X one level IV STEMI center = \$500 + \$500 for maintenance and upkeep of helipad X 1 year X one level IV STEMI center = \$500 for a total of \$1,000 annually thereafter.

Total cost for one level IV STEMI center for the first 3 year period - \$11,383,839 (letter A above) + \$1,499.82 (letter B above) + \$1,746,370 (letter C above) + \$198,000 (letter D above) + \$1,750 (letter E above) + \$114,774 (letter F above) + \$12,600 (letter G above) + \$1,500 (letter H above) + \$6,000 (letter I above) + \$45,300 (letter J above) = \$13,511,632 for the first 3 year period.

Total cost for one level IV STEMI center for annually thereafter - \$3,794,613 (letter A above) + \$499.94 (letter B above) + \$499,990 (letter C above) + \$66,000 (letter D above) + \$1,750 (letter E above) + \$38,258 (letter F above) + \$4,200 (letter G above) + \$500 (letter H above) + \$2,000 (letter I above) + \$1,000 (letter J above) = \$4,408,810.90 for annually thereafter.

It is expected that four level IV STEMI centers will be designated during the first 3 year period (\$54,046,528) and those same level IV STEMI centers will be designated again at some time (3 year intervals) annually thereafter (\$17,635,243.60).

**5. Total cost to the Department of Health and Senior Services for the STEMI program.**

- A. Computer - cost of contract to build a STEMI database for STEMI registry - \$25,000 for the first year = \$25,000 + \$6,800 per year for 2 years (years 2 through 3) for cost of contract for maintenance of STEMI registry database = \$13,600 for a total of \$38,600 for a 3 year period and \$6,800 per year for cost of contract for maintenance of STEMI registry = \$6,800 for annually thereafter.**

Total costs for the first 3 year period - (\$56,507,551 Level I - number 1 above) + (\$102,648,322 Level II - number 2 above) + (\$74,856,912 Level III - number 3 above) + (\$54,046,528 Level IV - number 4 above) + (\$38,600 DHSS costs) = \$288,097,913 for the first 3 year period.

Total costs for annually thereafter - (\$18,024,283 Level I - number 1 above) + (\$32,586,306 Level II - number 2 above) + (\$24,461,991.20 Level III - number 3

above) + (\$17,635,243.60 Level IV - number 4 above) + (\$6,800 DHSS costs) = \$92,714,623.80 for annually thereafter. This number has been rounded up.

#### **IV. ASSUMPTIONS**

The staffing and equipment requirements for designated STEMI centers are based on recommendations from a task force comprised of physicians and other health care providers from hospitals and emergency medical services agencies throughout the state and national standards and guidelines for STEMI centers.

Participation in Missouri's STEMI center program is voluntary and no hospital shall be required to participate. However, if a hospital chooses to apply to be designated as a STEMI center and would like to hold itself out as a state designated STEMI center, then it must apply for, be approved, comply with the applicable statutes and regulations and bear the costs detailed in this fiscal note. The costs in this fiscal note are for those hospitals which apply for and are approved to be a state designated STEMI center. Also, it is important to note that those hospitals applying for the appropriate levels of STEMI centers already have most of these items detailed in this fiscal note. This is explained throughout this assumption section below.

To obtain the potential numbers of STEMI centers that might be applying in the future to be a state designated STEMI center, the Department of Health and Senior Services used the number of state designated trauma centers as a guide. The Missouri trauma center program has been in effect since 1998. It should be noted that there are only 3 levels of trauma centers currently in Missouri (Level I, Level II and Level III). In addition, the proposed STEMI center numbers are greater than the number of proposed stroke center numbers as there has been more interest expressed by hospitals to the Department of Health and Senior Services for the STEMI center designation than for the stroke center designation.

There are approximately 18 public hospitals in Missouri.

Costs are estimated for a 3 year period because the designation for STEMI centers will be for a period of 3 years.

Salaries are based on average salaries as reported by salary.com available on the Internet.

Staffing is based on minimum level required by this rule. Some hospitals may choose to have additional staff as they deem appropriate to maintain levels of patient care.

Equipment costs are based on minimum levels required by the rule. These equipment costs are based on the amount it would cost to purchase these items through medical equipment suppliers.

Costs are expected to increase at an average rate of inflation.



**The Department of Health and Senior Services estimated that there will be at least 1 designated level I public hospital STEMI center during the first 3 year period and this same level I STEMI center will be designated annually thereafter.**

**The Department of Health and Senior Services estimated that there will be at least 2 designated level II public hospital STEMI centers during the first 3 year period and these same level II centers will be designated annually thereafter.**

**The Department of Health and Senior Services estimated that there will be at least 4 designated level III public hospital STEMI centers during the first 3 year period and these same 4 level III STEMI centers will be designated annually thereafter.**

**The Department of Health and Senior Services estimated that there will be at least 4 designated level IV public hospital STEMI centers during the first 3 year period and these same 4 level IV STEMI centers will be designated annually thereafter.**

**Many of the hospitals requesting to be a state designated STEMI center are going to have several of the required medical professionals already on staff so the costs of the medical professionals will probably not be a new cost to many hospitals. However, for hospitals without current STEMI centers, the STEMI medical director (required of levels I-IV), the STEMI program manager (required for levels I-IV), staff required for the intermediate care unit (required for levels I -III), an interventional cardiologist (required for level I and II's with cardiothoracic surgery capability) and a nurse educator to ensure staff meet core competencies (required for levels I-IV) might be new costs to these STEMI centers.**

**Physicians are required to complete continuing medical education pursuant to the STEMI regulations; however, this will most likely not be a new cost to physicians as physicians licensed in Missouri are required to complete 50 hours of continuing medical education every 2 years. Further, when figuring the costs of the continuing medical education and continuing education, the Department of Health and Senior Services used costs for online training. It should be noted that there are many free continuing education opportunities throughout the state of Missouri annually for both physicians and nurses. In addition, many physicians are independent from the hospitals and will incur these costs personally instead of the hospital incurring these costs.**

**Resuscitation equipment costs were detailed for each department for which resuscitation was required to be available. However, level I STEMI centers will already have a cardiac catheterization laboratory, an emergency department, an intensive care unit, a radiology department, an operating room, and a post-anesthesia recovery room and many will already have an intermediate care (step-down) unit. It is reasonable to believe that all of these departments currently existing in these hospitals already have resuscitation equipment so these costs will most likely not be new costs to level I STEMI centers.**

**For level II STEMI centers, it is likely the hospital requesting to be a level II STEMI center will already have an emergency department, an intensive care unit, a radiology department, an operating room and a post-anesthesia recovery room. Further these departments will already have the required resuscitation equipment.**



**For level III STEMI centers, it is likely the hospital requesting to be a level III STEMI center will already have an emergency department and a radiology department. Further, these departments will already have the required resuscitation equipment.**

**For level IV STEMI centers, it is likely the hospital requesting to be a level IV STEMI center will already have an emergency department and a radiology department. Further this emergency department will already have the required resuscitation equipment.**

**For level I and II STEMI centers, it is very likely the hospitals requesting to be a level I, or II STEMI center will already have a Computerized Tomography (CT) scan so this will not be a new cost to these STEMI centers.**

**For level I, II and III STEMI centers, it is very likely the hospitals requesting to be a level I, II or III STEMI center will already have X-ray capability in the radiology department and the operating room so this will not be a new cost to these STEMI centers.**

**For level I STEMI centers, it is very likely the hospitals will already have a functioning cardiac catheterization laboratory and therefore the resuscitation equipment and other equipment required to be in the laboratory will already have been purchased by level I STEMI centers.**

**For levels I, II, III and IV STEMI centers, it is very likely the hospitals requesting to be said STEMI centers will already have the equipment and ability to conduct laboratory analyses required for these STEMI centers so this should not be a new cost to these STEMI centers.**

**For level I, II, III and IV STEMI centers, it is likely that these hospitals already have a social worker providing support services in place, so this will not be a new cost for the STEMI centers.**

**For level I and II STEMI centers, it is likely that these hospitals already have a rehabilitation program in place, so this will not be a new cost for the STEMI centers.**

**For level I and II STEMI centers, it is likely the hospitals already have the required operating room equipment, so this will not be a new cost to the STEMI centers.**

**It is very likely members on the STEMI call roster are already going to be carrying electronic communications devices (a cell phone and beeper). Thus, it is likely these charges in Levels I, II, III and IV STEMI centers won't be a new cost to the STEMI centers.**

**FISCAL NOTE  
PRIVATE COST**

- I. Department Title: Missouri Department of Health and Senior Services  
Division Title: Division of Regulation and Licensure  
Chapter Title: Chapter 40-Comprehensive Emergency Medical Services System**

<b>Rule Number and Name:</b>	<b>19 CSR 30-40.760 Standards for ST Segment Elevation Myocardial Infarction (STEMI) Center Designation.</b>
<b>Type of Rulemaking:</b>	<b>Proposed</b>

**II. SUMMARY OF FISCAL IMPACT**

<b>Affected Agency or Political Subdivision</b>	<b>Estimated Cost of Compliance in the Aggregate</b>
<b>148 private hospitals</b>	
<b>Level I STEMI Centers</b>	<b>\$169,522,653 for the first 3 year period and \$54,072,849 for annually thereafter</b>
<b>Level II STEMI Centers</b>	<b>\$205,296,644 for the first 3 year period and \$65,172,612 for annually thereafter</b>
<b>Level III STEMI Centers</b>	<b>\$112,285,368 for the first 3 year period and \$42,808,485 for annually thereafter</b>
<b>Level IV STEMI Centers</b>	<b>\$81,069,792 for the first 3 year period and \$30,861,676 for annually thereafter</b>
<b>Total</b>	<b>\$568,174,457 for the first 3 year period and \$192,915,622 for annually thereafter</b>

**III. WORKSHEET**

**It is anticipated that most if not all of the STEMI centers voluntarily applying to be designated as STEMI centers will have the staff and equipment required to be the level of STEMI center for which they are applying to be designated. However, the list of required staff and equipment has been detailed below, even if it is assumed the hospital currently meets these requirements.**

**1. Level I STEMI centers.**

**A. Salary Costs for medical professionals.**

- 1) A physician experienced in diagnosing and treating cardiovascular disease - \$359,000 annually X one level I STEMI center = \$359,000 X 3 years = \$1,077,000 for the first 3 year period and \$359,000 annually X one level I STEMI center X 1 year = \$359,000 annually thereafter.**

- 2) At least 1 other health care professional or qualified individual credentialed in STEMI care - \$126,046 annually X one level I STEMI center = \$126,046 X 3 years = \$378,138 for the first 3 year period and \$126,046 annually X one level I STEMI center X 1 year = \$126,046 annually thereafter.
- 3) Interventional Cardiologist - \$359,000 annually X one level I STEMI center for the first 3 year period = \$359,000 X 3 years = \$1,077,000 for the first 3 year period and \$359,000 X one level I STEMI center X 1 year = \$359,000 annually thereafter.
- 4) Other health care professional as deemed necessary in the cardiac catheterization laboratory - \$59,750 annually X one level I STEMI center = \$59,750 X 3 years = \$179,250 for the first 3 year period and \$59,750 annually X one level I STEMI center X 1 year = \$59,750 annually thereafter.
- 5) STEMI center medical director who shall be a cardiologist or interventional cardiologist - \$359,000 annually X one level I STEMI center = \$359,000 X 3 years = \$1,077,000 for the first 3 year period and \$359,000 annually X one level I STEMI center X 1 year = \$359,000 annually thereafter.
- 6) STEMI program manager/coordinator who is a registered nurse or a qualified individual - \$126,046 annually X one level I STEMI center = \$126,046 X 3 years = \$378,138 for the first 3 year period and \$126,046 annually X one level I STEMI center X 1 year = \$126,046 annually thereafter.
- 7) Physician to direct cardiac rehabilitation services trained in cardiac rehabilitation - \$200,339 annually X one level I STEMI center = \$200,339 X 3 years = \$601,017 for the first 3 year period and \$200,339 annually X one level I STEMI center X 1 year = \$200,339 annually thereafter.
- 8) Cardiologist - \$359,000 annually X one level I STEMI center = \$359,000 X 3 years = \$1,077,000 for the first 3 year period and \$359,000 X one level I STEMI center X 1 year = \$359,000 annually thereafter.
- 9) Cardiothoracic surgeon - \$403,993 annually X one level I STEMI center = \$403,993 X 3 years = \$1,211,979 for the first 3 year period and \$403,993 annually X one level I STEMI center X 1 year = \$403,993 annually thereafter.
- 10) An internal medicine physician - \$181,823 annually X one level I STEMI center = \$181,823 X 3 years = \$545,469 for the first 3 year period and \$181,823 annually X one level I STEMI center X 1 year = \$181,823 annually thereafter.
- 11) A diagnostic radiologist - \$402,539 annually X one level I STEMI center = \$402,539 X 3 years = \$1,207,617 for the first 3 year period and \$402,539 annually X one level I STEMI center X 1 year = \$402,539 annually thereafter.
- 12) An anesthesiologist - \$331,932 annually X one level I STEMI center for the first 3 year period = \$331,932 X 3 years = \$995,796 for the first 3 year period and \$331,932 annually X one level I STEMI center X 1 year = \$331,932 annually thereafter.

- 13) Anesthesiology resident - \$61,000 annually X one level I STEMI center = \$61,000 X 3 years = \$183,000 for the first 3 year period and \$61,000 annually X one level I STEMI center X 1 year = \$61,000 annually thereafter.
- 14) Certified nurse anesthetists - \$155,095 annually X one level I STEMI center = \$155,095 X 3 years = \$465,285 for the first 3 year period and \$155,095 annually X one level I STEMI center X 1 year = \$155,095 annually thereafter.
- 15) Anesthesia assistants - \$120,000 annually X one level I STEMI center = \$120,000 X 3 years = \$360,000 for the first 3 year period and \$120,000 X one level I STEMI center X 1 year = \$120,000 annually thereafter.
- 16) Emergency department physician credentialed for STEMI care by the STEMI center 24 hours a day, 7 days a week - \$244,973 annually X 3 emergency department physicians X one level I STEMI center = \$734,919 X 3 years = \$2,204,757 for the first 3 year period and \$244,973 annually X 3 physicians X one level I STEMI center X 1 year = \$734,919 annually thereafter.
- 17) Registered nurses in the emergency department - \$64,533 annually X 5 registered nurses in the emergency department X one level I STEMI center = \$322,665 X 3 years = \$967,995 for the first 3 year period and \$322,665 X one level I STEMI center X 1 year = \$322,665 annually thereafter.
- 18) Medical director of the emergency department - \$199,038 annually X one level I STEMI center = \$199,038 X 3 years = \$597,114 for the first 3 year period and \$199,038 X one level I STEMI center X 1 year = \$199,038 annually thereafter.
- 19) A medical director for a designated intensive care unit - \$177,560 annually X one level I STEMI center = \$177,560 X 3 years = \$532,680 for the first 3 year period and \$177,560 annually X one level I STEMI center X 1 year = \$177,560 annually thereafter.
- 20) A physician on duty or available 24 hours a day 7 days a week in the designated intensive care unit - \$244,553 annually X 3 STEMI center intensive care unit physicians X one level I STEMI center = \$733,659 X 3 years = \$2,200,977 for the first 3 year period and \$244,553 annually X 3 STEMI center intensive care unit physicians = \$733,659 annually X one level I STEMI center X 1 year = \$733,659 annually thereafter.
- 21) The designated intensive care unit shall have a 1 to 1 or 1 to 2 registered nurse/patient ratio used for critically ill patients requiring intensive care unit level of care - \$67,623 annually X 5 registered nurses in the designated intensive care unit X one level I STEMI center = \$338,115 X 3 years = \$1,014,345 for the first 3 year period and \$67,623 X 5 registered nurses = \$338,115 annually X one level I STEMI center X 1 year = \$338,115 annually thereafter.
- 22) Intermediate care unit medical director - \$177,560 annually X one level I STEMI center = \$177,560 X 3 years = \$532,680 for the first 3 year period and \$177,560 annually X one level I STEMI center X 1 year = \$177,560 annually thereafter.

- 23) Physician on duty or available 24 hours a day, 7 days a week in the intermediate care unit - \$177,560 annually X 3 physicians in the intermediate unit X one level I STEMI center = \$532,680 X 3 years = \$1,598,040 for the first 3 year period and \$177,560 annually X 3 physicians = \$532,680 annually X one level I STEMI center X 1 year = \$532,680 annually thereafter.
- 24) The intermediate care unit shall have registered nurses and other essential personnel on duty 24 hours a day 7 days a week - \$65,097 annually for the registered nurse X 4 registered nurses in the intermediate care unit X one level I STEMI center = \$260,388 X 3 years = \$781,164 for the first 3 year period and \$65,097 X 4 registered nurses = \$260,388 annually X one level I STEMI center X 1 year = \$260,388 annually thereafter.
- 25) Certified Nursing Technician - \$30,000 annually X one level I STEMI center = \$30,000 X 3 years = \$90,000 for the first 3 year period and \$30,000 annually X one level I STEMI center X 1 year = \$30,000 annually thereafter.
- 26) The STEMI center post-anesthesia recovery room shall have registered nurses and other essential personnel on call and available within 60 minutes 24 hours a day 7 days a week - \$65,097 annually X 4 registered nurses X one level I STEMI center = \$260,388 X 3 years = \$781,164 for the first 3 year period and \$65,097 X 4 registered nurses = \$260,388 annually X one level I STEMI center X 1 year = \$260,388 annually thereafter.
- 27) Computerized tomography technician - \$58,895 annually X 4 computerized tomography technicians X one level I STEMI center = \$235,580 X 3 years = \$706,740 for the first 3 year period and \$58,895 X 4 computerized tomography technicians = \$235,580 X one level I STEMI center X 1 year = \$235,580 annually thereafter.
- 28) Radiologist - average \$300,000 annually X 3 neurologist/radiologists X one level I STEMI center = \$900,000 X 3 years = \$2,700,000 for the first 3 year period and \$300,000 X 3 neurologists/radiologists = \$900,000 annually X one level I STEMI center X 1 year = \$900,000 annually thereafter.
- 29) Transport nurse - average \$62,000 annually X one level I STEMI center = \$62,000 X 4 transport nurses = \$248,000 X 3 years = \$744,000 for the first 3 year period and \$62,000 annually X 4 transport nurses X one level I STEMI center X 1 year = \$248,000 annually thereafter.
- 30) Radiology technician - average \$62,000 annually X 4 radiology technicians X one level I STEMI center = \$248,000 X 3 years = \$744,000 for the first 3 year period and \$62,000 annually X 4 radiology technicians X one level I STEMI center X 1 year = \$248,000 annually thereafter.
- 31) Scrub nurse - \$68,655 annually X 4 scrub nurses X one level I STEMI center = \$274,620 X 3 years = \$823,860 for the first 3 year period and \$68,655 X 4 scrub nurses = \$274,620 annually X one level I STEMI center X 1 year = \$274,620 annually thereafter.
- 32) Clinical perfusionist - \$111,420 annually X one level I STEMI center = \$111,420 X 3 years = \$334,260 for the first 3 year period and

\$111,420 annually X one level I STEMI center X 1 year = \$111,420 annually thereafter.

- 33) Nurse educator/supervisor to ensure staff are trained on core competencies - \$78,500 annually X one level I STEMI center = \$78,500 X 3 years = \$235,500 for the first 3 year period and \$78,500 annually X one level I STEMI center X 1 year = \$78,500 annually thereafter.

Total cost for salaries for medical professionals for the first 3 year period - \$1,077,000 (#1 above) + \$378,138 (#2 above) + \$1,077,000 (#3 above) + \$179,250 (#4 above) + \$1,077,000 (#5 above) + \$378,138 (#6 above) + \$601,017 (#7 above) + \$1,077,000 (#8 above) + \$1,211,979 (#9 above) + \$545,469 (#10 above) + \$1,207,617 (#11 above) + \$995,796 (#12 above) + \$183,000 (#13 above) + \$465,285 (#14 above) + \$360,000 (#15 above) + \$2,204,757 (#16 above) + \$967,995 (#17 above) + \$597,114 (#18 above) + \$532,680 (#19 above) + \$2,200,977 (#20 above) + \$1,014,345 (#21 above) + \$532,680 (#22 above) + \$1,598,040 (#23 above) + \$781,164 (#24 above) + \$90,000 (#25 above) + \$781,164 (#26 above) + \$706,740 (#27 above) + \$2,700,000 (#28 above) + \$744,000 (#29 above) + \$744,000 (#30 above) + \$823,860 (#31 above) + \$334,260 (#32 above) + \$235,500 (#33 above) = \$28,402,965 for the first 3 year period.

Total cost for the salaries for the medical professionals for annually thereafter - \$359,000 (#1 above) + \$126,046 (#2 above) + \$359,000 (#3 above) + \$59,750 (#4 above) + \$359,000 (#5 above) + \$126,046 (#6 above) + \$200,339 (#7 above) + \$359,000 (#8 above) + \$403,993 (#9 above) + \$181,823 (#10 above) + \$402,539 (#11 above) + \$331,932 (#12 above) + \$61,000 (#13 above) + \$155,095 (#14 above) + \$120,000 (#15 above) + \$734,919 (#16 above) + \$322,665 (#17 above) + \$199,038 (#18 above) + \$177,560 (#19 above) + \$733,659 (#20 above) + \$338,115 (#21 above) + \$177,560 (#22 above) + \$532,680 (#23 above) + \$260,388 (#24 above) + \$30,000 (#25 above) + \$260,388 (#26 above) + \$235,580 (#27 above) + \$900,000 (#28 above) + \$248,000 (#29 above) + \$248,000 (#30 above) + \$274,620 (#31 above) + \$111,420 (#32 above) + \$78,500 (#33 above) = \$9,467,655 for annually thereafter.

**B. Continuing education costs for level I STEMI center staff.**

- 1) Level I core team members of the STEMI call roster shall complete a minimum of 10 hours of continuing education in the area of acute coronary syndrome every year – average of \$10.00 per hour for online training X 10 hours = \$100 X one level I STEMI center = \$100 X 3 years = \$300 for the first 3 year period and \$100 X one level I STEMI center X 1 year = \$100 annually thereafter.
- 2) Level I core team member of the STEMI call roster shall complete a minimum of 10 hours of continuing education in the area of acute coronary syndrome every year - average of \$39.99 annually for online training - \$39.99 X one level I STEMI center = \$39.99 X 3 years =

- \$119.97 for the first 3 year period and \$39.99 X one level I STEMI center X 1 year = \$39.99 annually thereafter.
- 3) Level I STEMI call roster member (emergency department physician) shall complete a minimum average of 10 hours of continuing education in cardiovascular disease every year - average of \$10.00 per hour for online training X 10 hours X one level I STEMI center = \$100 X 3 years = \$300 for the first 3 year period and \$100 X one level I STEMI center X 1 year = \$100 annually thereafter.
  - 4) Level I STEMI call roster member (interventional cardiologist) shall complete a minimum average of 10 hours of continuing education in the area of cardiovascular disease every year - average of \$10.00 per hour for online training x 10 hours X one level I STEMI center = \$100 X 3 years = \$300 for the first 3 year period and \$100 X one level I STEMI center X 1 year = \$100 annually thereafter.
  - 5) Level I STEMI call roster member (others as appropriate) shall complete a minimum average of 10 hours of continuing education in the area of cardiovascular disease every year - average of \$10.00 per hour for online training X 10 hours X one level I STEMI center = \$100 annually X 3 others as appropriate = \$300 X 3 years = \$900 for the first 3 year period and \$300 X one level I STEMI center X 1 year = \$300 annually thereafter.
  - 6) A level I STEMI center medical director shall complete a minimum of 10 hours of continuing medical education every year in the area of acute coronary syndrome - average of \$10.00 per hour for online training X 10 hours X one level I STEMI center = \$100 X 3 years = \$300 for the first 3 year period and \$100 X one level I STEMI center X 1 year = \$100 annually thereafter.
  - 7) A level I program coordinator/ manager shall complete a minimum of 10 hours of continuing education every year in the area of cardiovascular disease - average of \$39.99 annually for online training = \$39.99 X one level I STEMI center = \$39.99 X 3 years = \$119.97 for the first 3 year period and \$39.99 X one level I STEMI center X 1 year = \$39.99 annually thereafter.
  - 8) Emergency department physicians in level I STEMI centers shall complete a minimum average of 4 hours of continuing medical education in cardiovascular disease every year - average of \$10.00 per hour for online training X 3 physicians in the emergency room X 4 hours X one level I STEMI center = \$120 X 3 years = \$360 for the first 3 year period and \$10.00 X 3 physicians X 4 hours X one level I STEMI center X 1 year = \$120 annually thereafter.
  - 9) Registered nurses assigned to the emergency departments in level I STEMI centers shall complete a minimum of 4 hours of continuing education in the area of cardiovascular disease every year - average of \$39.99 annually for online training = \$39.99 X 5 registered nurses in the emergency room X one level I STEMI center X 3 years = \$599.85 for the first 3 year period and \$39.99 X 5 registered nurses in the emergency room X one level I STEMI center X 1 year = \$199.95 annually thereafter.
  - 10) Registered nurses assigned to the intensive care unit in level I STEMI centers who care for STEMI patients shall complete a minimum of 8



hours of continuing education in the area of cardiovascular disease every year - average of \$39.99 annually for online training X 5 registered nurses in the intensive care unit X one level I STEMI center X 3 years = \$599.85 for the first 3 year period and \$39.99 annually X 5 registered nurses in the intensive care unit X one level I STEMI center X 1 year = \$199.95 annually thereafter.

- 11) Registered nurses and clinical staff assigned to the cardiac catheterization laboratory shall complete a minimum of eight hours of continuing education every year in the area of acute coronary syndrome - average of \$39.99 annually for online training X 5 staff in the catheterization laboratory X one level I STEMI center X 3 years = \$599.85 for the first 3 year period and \$39.99 annually X 5 staff in the catheterization laboratory X one level I STEMI center X 1 year = \$199.95 annually thereafter.

- 12) Registered nurses assigned to the intermediate care unit in level I STEMI centers shall complete a minimum of 8 hours of continuing education in the area of cardiovascular disease every year - average of \$39.99 annually X 4 intermediate unit registered nurses X one level I STEMI center X 3 years = \$479.88 for the first 3 year period and \$39.99 X 4 registered nurses X one level I STEMI center X 1 year = \$159.96 annually thereafter.

Total cost for continuing education for level I STEMI center staff for the first 3 year period - \$300 (#1 above) + \$119.97 (#2 above) + \$300 (#3 above) + \$300 (#4 above) + \$900 (#5 above) + \$300 (#6 above) + \$119.97 (#7 above) + \$360 (#8 above) + \$599.85 (#9 above) + \$599.85 (#10 above) + \$599.85 (#11 above) + \$479.88 (#12 above) = \$4,979.37 for the first 3 year period.

Total cost for continuing education for level I STEMI center staff for annually thereafter - \$100 (#1 above) + \$39.99 (#2 above) + \$100 (#3 above) + \$100 (#4 above) + \$300 (#5 above) + \$100 (#6 above) + \$39.99 (#7 above) + \$120 (#8 above) + \$199.95 (#9 above) + \$199.95 (#10 above) + \$199.95 (#11 above) + \$159.96 (#12 above) = \$1659.79 for annually thereafter.

### **C. Medical Equipment.**

- 1) Electronic communication devices for STEMI/ cardiac catheterization lab team members - 2 electronic communication devices (cell phone and beeper) X \$300 for the annual cost of each electronic communication device X 2 STEMI/cardiac catheterization lab team members carrying this device ( one member on call and one back-up member) X one level I STEMI center X 3 years = \$3,600 for the first 3 year period and 2 electronic communication devices (cell phone and beeper) X \$300 for the annual cost of each electronic communication device X 2 STEMI call roster members ( one member on call and one back-up member) carrying this device X one level I STEMI center X 1 year = \$1,200 annually thereafter.



- 2) Resuscitation equipment for the emergency department-
  - a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level I STEMI center = \$600 X 3 years = \$1,800 for the first 3 year period and at least 2 X \$300 each = \$600 X one level I STEMI center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period and \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 1 year = \$12,500 annually thereafter.
  - c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period and \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 1 year = \$12,500 annually thereafter.
  - d) Sources of oxygen - (air outlet \$70 X 7 = \$490 for the first year for one level I STEMI center + \$150 per year X 2 years for upkeep and maintenance of air outlets for one level I STEMI center = \$300 for a total of \$790 for air outlets for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X 3 years for one level I STEMI center = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X 3 years for one level I STEMI center = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X 3 years for one level I STEMI center = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X 3 years for one level I STEMI center = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 3 years for one level I STEMI center = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X 3 years for one level I STEMI center = \$600 for the first 3 year period) for a total of \$73,990 for the first 3 year period and (air outlet upkeep and maintenance \$150 X one level I STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 15 X one level I STEMI center X 1 year = \$525) + (nasal cannula \$.40 X 500 patients X one level I STEMI center X 1 year = \$200) + (masks \$2.40 X 500 X one level I STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 X one level I STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 X one level I STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 X one level I STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients X one level I STEMI center X 1 year = \$200) for a total of \$25,075 annually thereafter.
  - e) Mechanical ventilator - \$7000 X one level I STEMI center = \$7000 for the first year and \$1,500 for the annual upkeep and maintenance in the future of one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for 2 years for a total of \$10,000 for the first 3 year period and \$1,500 for the upkeep and maintenance for one level I STEMI center X 1 year = \$1,500 annually thereafter.

- f) Suction devices - suction device canisters and tubing for wall suction  $\$50 \times 500$  patients =  $\$25,000$  X one level I STEMI center =  $\$25,000 \times 3$  years =  $\$75,000$  for the first 3 year period and  $\$50 \times 500$  patients X one level I STEMI center X 1 year =  $\$25,000$  annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator -  $\$37,895$  for the cost of the first year and  $\$1,500$  for the annual upkeep and maintenance of one level I STEMI center X 2 years (years 2 through 3) =  $\$3,000$  for a total of  $\$40,895$  for the first 3 year period and  $\$1,500$  for upkeep and maintenance X one level I STEMI center X 1 year =  $\$1,500$  annually thereafter.
- h) Central line insertion equipment -  $\$600 \times 300$  patients =  $\$180,000$  X one level I STEMI center =  $\$180,000 \times 3$  years =  $\$540,000$  for the first 3 year period and  $\$600 \times 300$  patients =  $\$180,000$  X one level I STEMI center X 1 year =  $\$180,000$  annually thereafter.
- i) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - ( $\$4.00$  each for standard intravenous fluids X 500 patients =  $\$2,000$ ) + ( $\$4.00$  each for standard administration devices X 500 patients =  $\$2,000$ ) + ( $\$4.00$  each for standard intravenous catheters X 500 =  $\$2,000$ ) =  $\$6,000$  X one level I STEMI center =  $\$6,000 \times 3$  years =  $\$18,000$  for the first 3 year period and  $\$6,000$  X one level I STEMI center X 1 year =  $\$6,000$  annually thereafter.
- j) Intraosseous devices -needles  $\$25$  each X 300 patients =  $\$7,500$  X one level I STEMI center =  $\$7,500 \times 3$  years =  $\$22,500$  for the first 3 year period and  $\$25$  each X 300 patients =  $\$7,500$  X one level I STEMI center X 1 year =  $\$7,500$  annually thereafter.
- k) Drugs necessary for STEMI emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate  $\$100 \times 500$  patients =  $\$50,000$  X one level I STEMI center =  $\$50,000 \times 3$  years =  $\$150,000$  for the first 3 year period and  $\$100 \times 500$  =  $\$50,000$  X one level I STEMI center X 1 year =  $\$50,000$  annually thereafter.
- l) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries)  $\$50 \times 500$  patients =  $\$25,000$  X one level I STEMI center X 3 years =  $\$75,000$  for the first 3 year period and  $\$25,000$  X one level I STEMI center X 1 year =  $\$25,000$  annually thereafter.
- m) Two-way communication link with emergency medical service vehicles / equipment necessary to communicate with emergency medical services regarding pre-hospital ECG STEMI findings -  $\$1,200$  apiece X one level I STEMI center =  $\$1,200$  for the first year +  $\$200$  for upkeep and maintenance for one level I STEMI center X 2 years (years 2 through 3) =  $\$400$  for a total of  $\$1,600$  for the first 3 year period and  $\$200$  for upkeep and maintenance for one level I STEMI center X 1 year =  $\$200$  annually thereafter.
- n) End-tidal carbon dioxide monitor -  $\$3,900$  X one level I STEMI center =  $\$3,900$  for the first year and  $\$1,500$  for the annual upkeep and maintenance for one level I STEMI center X 2 years (years 2 through 3) =  $\$3,000$  for a total of  $\$6,900$  for the first 3 year period

and \$1,500 for the annual upkeep and maintenance for one level I STEMI center X one level I STEMI center X 1 year = \$1,500 annually thereafter.

- o) Temperature control devices for patient and resuscitation fluids - \$270 pack of 10 (Bair Hugger Therapy) X 30 = \$8,100 X one level I STEMI center X 3 years = \$24,300 for the first 3 year period and \$270 pack of 10 (Bair Hugger Therapy) X 30 = \$8,100 X one level I STEMI center X 1 year = \$8,100 annually thereafter.
- p) External pacemaker - \$10 per set for pacer electrodes average cost (this will be used with the cardiac defibrillator already accounted for in g above) X 30 = \$300 X one level I STEMI center X 3 years = \$900 for the first 3 year period and \$10 per set X 30 = \$300 X one level I STEMI center X 1 year = \$300 annually thereafter.
- q) Transvenous pacemaker - \$200 average cost of pacer wires and equipment X 30 = \$6,000 X one level I STEMI center X 3 years = \$18,000 + generator cost \$7,000 X 5 generators = \$35,000 for the first year + \$1,000 X 2 years (years 2 through 3) for maintenance and upkeep of generators for a total of \$37,000 for the generators and a total of \$55,000 for the first 3 year period and \$200 average cost X 30 = \$6,000 + \$1,000 for the maintenance and upkeep of the generator = \$7,000 X one level I STEMI center X 1 year = \$7,000 annually thereafter.

**Total cost for resuscitation equipment for one level I STEMI center for the emergency room department for the first 3 year period - \$1,800 (letter a above) + \$37,500 (letter b above) + \$37,500 (letter c above) + \$73,990 (letter d above) + \$10,000 (letter e above) + \$75,000 (letter f above) + \$40,895 (letter g above) + \$540,000 (letter h above) + \$18,000 (letter i above) + \$22,500 (letter j above) + \$150,000 (letter k above) + \$75,000 (letter l above) + \$1,600 (letter m above) + \$6,900 (letter n above) + \$24,300 (letter o above) + \$900 (letter p above) + \$55,000 (letter q above) = \$1,170,885 for the first 3 year period.**

**Total cost for resuscitation equipment for one level I STEMI center for the emergency room department for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,075 (letter d above) + \$1,500 (letter e above) + \$25,000 (letter f above) + \$1,500 (letter g above) + \$180,000 (letter h above) + \$6,000 (letter i above) + \$7,500 (letter j above) + \$50,000 (letter k above) + \$25,000 (letter l above) + \$200 (letter m above) + \$1,500 (letter n above) + \$8,100 (letter o above) + \$300 (letter p above) + \$7,000 (letter q above) = \$364,275 for annually thereafter.**

- 3) Resuscitation equipment for the intensive care unit -
  - a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes, bag-mask resuscitator, and a mechanical ventilator - (laryngoscopes at least 2 X \$300 each = \$600 X 3 years X one level I STEMI center = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10

X 50 packs = \$12,500 X 3 years X one level I STEMI center = \$37,500 for the first 3 year period) + (bag-mask resuscitator \$250 for a pack of 10 X 50 packs X 3 years X one level I STEMI center = \$37,500 for the first 3 year period) + (mechanical ventilator \$7000 X one level I STEMI center X 1 year (the first year) + \$1,500 for the upkeep and maintenance of ventilator X 2 years (years 2 through 3) X one level I STEMI center = \$3,000 for a total of \$10,000 for the first 3 year period) = for a total of \$86,800 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level I STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 1 year = \$12,500) + (bag-mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 1 year = \$12,500) + (mechanical ventilator \$1,500 for upkeep and maintenance X one level I STEMI center X 1 year = \$1500) = \$1,500 for a total of \$27,100 annually thereafter.

- b) Oxygen source with concentration controls - (air outlet \$70 X 7 = \$490 X one level I STEMI center X 1 year (the first year) = \$490 + \$150 for upkeep and maintenance of air outlets X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator \$35 X 25 = \$875 X 3 years X one level I STEMI center = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 = \$200 X 3 years X one level I STEMI center = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X 3 years X one level I STEMI center = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X 3 years X one level I STEMI center = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X 3 years X one level I STEMI center = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 3 years X one level I STEMI center = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X 3 years X one level I STEMI center = \$600 for the first 3 year period) for a total of \$76,615 for the first 3 year period and (air outlet upkeep and maintenance = \$150 X one level I STEMI center X 1 year = \$150 + (regulator \$35 X 25 = \$875 X one level I STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 = \$200 X one level I STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) for a total of \$25,425 annually thereafter.

- c) Cardiac emergency cart, including medications - \$1600 cart + medications and suction devices \$1000 = \$2,600 X one level I STEMI center X 1 year (the first year) = \$2,600 + \$1,000 medications X 2 years (years 2 through 3) = \$2,000 for a total of \$4,600 for the first 3 year period and \$1,000 medications and

suction devices X one level I STEMI center X 1 year = \$1,000 annually thereafter.

- d) Telemetry, electrocardiograph capability, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X 3 years X one level I STEMI center = \$1,200,000) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X 1 year (first year) X one level I STEMI center = \$37,895 + \$1,500 X 2 years (years 2 through 3) X one level I STEMI center = \$3,000 for a total of \$40,895) for a total of \$1,240,895 for the first 3 year period and (telemetry \$800 X 500 patients = \$400,000 X one level I STEMI center X 1 year = \$400,000) + (\$1,500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level I STEMI center X 1 year = \$1,500) for a total of \$401,500 for one level I STEMI center annually thereafter.
- e) Electronic pressure monitoring and pulse oximetry - (electronic pressure monitoring devices \$100 X 25 = \$2,500 X 3 years X one level I STEMI center = \$7,500) + (pulse oximetry devices \$100 X 25 = \$2,500 X 3 years X one level I STEMI center = \$7,500) for a total of \$15,000 for the first 3 year period and electronic pressure monitoring devices \$100 X 25 X one level I STEMI center X 1 year = \$2,500 + pulse oximetry devices \$100 X 25 X one level I STEMI center X 1 year = \$2,500 for a total of \$5,000 annually thereafter.
- f) End-tidal carbon dioxide monitor - \$3,900 X one level I STEMI center X 1 year (first year) = \$3,900 for the first year + \$1,500 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$6,900 for the first 3 year period and \$1,500 X one level I STEMI center X 1 year = \$1,500 annually thereafter.
- g) Patient weight devices - \$1000 X one level I STEMI center X 1 year (the first year) + \$250 annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$500 for a total of \$1,500 for the first 3 year period and \$250 X one level I STEMI center X 1 year = \$250 annually thereafter.
- h) Drugs, intravenous fluids and supplies - (drugs are already accounted for in letter c above) (all standard intravenous fluids \$4.00 each X 500 patients = \$2,000 X 3 years X one level I STEMI center = \$6,000) + (all standard administration devices \$4.00 each X 500 patients = \$2,000 X 3 years X one level I STEMI center = \$6,000) + (all standard intravenous catheters \$4.00 each X 500 patients = \$2,000 X 3 years X one level I STEMI center = \$6,000) for a total of \$18,000 for the first 3 year period and (all standard intravenous fluids \$4.00 each X 500 patients X one level I STEMI center X 1 year = \$2,000) + (all standard administration devices \$4.00 each X 500 patients X one level I STEMI center X 1 year = \$2,000) + (all standard intravenous catheters \$4.00 each X 500 patients X one level I STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- i) External pacemaker - \$10 per set for pacer electrodes average cost (this will be used with the cardiac defibrillator already accounted for in d above) X 30 = \$300 X one level I STEMI center X 3 years

= \$900 for the first 3 year period and \$10 per set X 30 = \$300 X one level I STEMI center X 1 year = \$300 annually thereafter.

- j) Transvenous pacemaker - \$200 average cost of pacer wires and equipment X 30 = \$6,000 X one level I STEMI center X 3 years = \$18,000 + generator cost \$7,000 X 5 generators = \$35,000 for the first year + \$1,000 X 2 years (years 2 through 3) for maintenance and upkeep of generators for a total of \$37,000 for the generators and a total of \$55,000 for the first 3 year period and \$200 average cost X 30 = \$6,000 + \$1,000 for the maintenance and upkeep of the generator = \$7,000 X one level I STEMI center X 1 year = \$7,000 annually thereafter.

Total cost for resuscitation equipment for one level I STEMI center for the intensive care unit for the first 3 year period - \$86,800 (letter a above) + \$76,615 (letter b above) + \$4,600 (letter c above) + \$1,240,895 (letter d above) + \$15,000 (letter e above) + \$6,900 (letter f above) + \$1,500 (letter g above) + \$18,000 (letter h above) + \$900 (letter i above) + \$55,000 (letter j above) = \$1,506,210 for the first 3 year period.

Total cost for resuscitation equipment for one level I STEMI center for the intensive care unit for annually thereafter - \$27,100 (letter a above) + \$25,425 (letter b above) + \$1,000 (letter c above) + \$401,500 (letter d above) + \$5,000 (letter e above) + \$1,500 (letter f above) + \$250 (letter g above) + \$6,000 (letter h above) + \$300 (letter i above) + \$7,000 (letter j above) = \$475,075 annually thereafter.

- 4) Cardiac Catheterization lab diagnostic and interventional equipment-
- a) Sheaths - \$2,000 average cost X 500 = \$1,000,000 X one level I STEMI center X 3 years = \$3,000,000 for the first 3 year period and \$2,000 X 500 patients = \$1,000,000 X one level I STEMI center X 1 year = \$1,000,000 annually thereafter.
  - b) Diagnostic wires - \$200 average cost X 250 = \$50,000 X one level I STEMI center X 3 years = \$150,000 for the first 3 year period and \$200 X 250 = \$50,000 X one level I STEMI center X 1 year = \$50,000 annually thereafter.
  - c) Diagnostic catheters - \$200 average cost X 250 = \$50,000 X one level I STEMI center X 3 years = \$150,000 for the first 3 year period and \$200 X 250 = \$50,000 X one level I STEMI center X 1 year = \$50,000 annually thereafter.
  - d) Manifold or contrast injector/delivery system - \$200 average cost X 250 = \$50,000 X one level I STEMI center X 3 years = \$150,000 for the first 3 year period and \$200 X 250 = \$50,000 X one level I STEMI center X 1 year = \$50,000 annually thereafter.
  - e) Pressure tubing - \$125.00 average cost for 96 inches of pressure tubing X 250 = \$31,250 X one level I STEMI center X 3 years = \$93,750 for the first 3 year period and \$125.00 average cost for 96

- inches X 250 = \$31,250 X one level I STEMI center X 1 year = \$31,250 annually thereafter.
- f) Interventional guide wires - \$350 X 250 = \$87,500 X one level I STEMI center X 3 years = \$262,500 for the first 3 year period and \$350 X 250 = \$87,500 X one level I STEMI center X 1 year = \$87,500 annually thereafter.
  - g) Interventional guide catheters - \$26 X 250 = \$6,500 X one level I STEMI center X 3 years = \$19,500 for the first 3 year period and \$26 X 250 = \$6,500 X one level I STEMI center X 1 year = \$6,500 annually thereafter.
  - h) Balloon catheters (compliant and non-compliant) - \$500 X 250 = \$125,000 X one level I STEMI center X 3 years = \$375,000 for the first 3 year period and \$500 X 250 = \$125,000 X one level I STEMI center X 1 year = \$125,000 annually thereafter.
  - i) Stents (bare metal stents and drug eluting stents) – (bare metal stent \$1,000 X 100 = \$100,000) + (drug eluting stents \$2,500 X 150 = \$375,000) for a total of \$475,000 X one level I STEMI center X 3 years = \$1,425,000 for the first 3 year period and (bare metal stent \$1,000 X 100 = \$100,000) + (drug eluting stents \$2,500 X 150 = \$375,000) for a total of \$475,000 X one level I STEMI center X 1 year = \$475,000 annually thereafter.
  - j) Balloon pump catheters - \$500 X 250 = \$125,000 X one level I STEMI center X 3 years = \$375,000 for the first 3 year period and \$500 X 250 = \$125,000 X one level I STEMI center X 1 year = \$125,000 annually thereafter.
  - k) Thrombectomy aspiration catheters/mechanical thrombectomy device - \$600 X 250 = \$150,000 X one level I STEMI center X 3 years = \$450,000 for the first 3 year period and \$600 X 250 = \$150,000 X one level I STEMI center X 1 year = \$150,000 annually thereafter.
  - l) Balloon pump - (\$73,000 X 1 machine X one level I STEMI center X 1 year = \$73,000 for the first year) + (\$3,000 for upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$6,000) = for a total of \$79,000 for the first 3 year period and \$3000 for upkeep and maintenance X one level I STEMI center X 1 year = \$3,000 annually thereafter.
  - m) Left ventricular assistive device - \$70,000 X 25 = \$1,750,000 X one level I STEMI center X 3 years = \$5,250,000 for the first 3 year period and \$70,000 X 25 = \$1,750,000 X one level I STEMI center X 1 year = \$1,750,000 annually thereafter.
  - n) Embolic protection device - \$4,000 X 50 = \$200,000 X one level I STEMI center X 3 years = \$600,000 for the first 3 year period and \$200,000 X one level I STEMI center X 1 year = \$200,000 annually thereafter.

Total cost for one level I STEMI center for cardiac catheterization lab diagnostic and interventional equipment for the first 3 year period - \$3,000,000 (letter a above) + \$150,000 (letter b above) + \$150,000 (letter c above) + \$150,000 (letter d above) + \$93,750 (letter e above) + \$262,500 (letter f above) + \$19,500 (letter g



above) + \$375,000 (letter h above) + \$1,425,000 (letter i above) + \$375,000 (letter j above) + \$450,000 (letter k above) + \$79,000 (letter l above) + \$5,250,000 (letter m above) + \$600,000 (letter n above) = \$12,379,750 for the first 3 year period.

Total cost for one level I STEMI center for the cardiac catheterization lab diagnostic and interventional equipment for annually thereafter - \$1,000,000 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$50,000 (letter d above) + \$31,250 (letter e above) + \$87,500 (letter f above) + \$6,500 (letter g above) + \$125,000 (letter h above) + \$475,000 (letter i above) + \$125,000 (letter j above) + \$150,000 (letter k above) + \$3,000 (letter l above) + \$1,750,000 (letter m above) + \$200,000 (letter n above) = \$4,103,250 for annually thereafter.

**5) Cardiac catheterization lab resuscitation equipment-**

- a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes - (laryngoscopes at least 2 X \$300 each = \$600 X one level I STEMI center X 3 years = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period) + (mechanical ventilator \$7000 X one level I STEMI center X 1 year (the first year) + \$1,500 for annual upkeep and maintenance of ventilator X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$10,000) for a total of \$49,300 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level I STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 1 year = \$12,500) + (mechanical ventilator \$1,500 annual upkeep and maintenance X one level I STEMI center X 1 year = \$1,500) for a total of \$14,600 annually thereafter.
- b) Bag-mask resuscitator and sources of oxygen - (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period) + (air outlet \$70 X 7 = \$490 X one level I STEMI center X 1 year (the first year) + \$150 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level I STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200



X one level I STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$114,115 for the first 3 year period and (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 1 year = \$12,500) + (air outlet \$150 for annual upkeep and maintenance X one level I STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level I STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) for a total of \$37,925 annually thereafter.

- c) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level I STEMI center X 1 year = \$25,000 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator- (telemetry \$800 X 500 patients = \$400,000 X one level I STEMI center X 3 years = \$1,200,000 for the first 3 year period) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X one level I STEMI center X 1 year (the first year) + \$1,500 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period) for a total of \$1,240,895 for the first 3 year period and (telemetry \$800 X 500 patients = \$400,000 X one level I STEMI center X 1 year = \$400,000) + (\$1,500 for annual upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level I STEMI center X 1 year = \$1,500) for a total of \$401,500 annually thereafter.
- e) All standard intravenous fluids and administration devices and intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) for a total of \$18,000 for the first 3 year period (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.

- f) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 100 patients = \$10,000 X one level I STEMI center X 3 years = \$30,000 for the first 3 year period and \$10,000 X one level I STEMI center X 1 year = \$10,000 annually thereafter.
- g) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level I STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level I STEMI center for the cardiac catheterization lab for the first 3 year period - \$49,300 (letter a above) + \$114,115 (letter b above) + \$75,000 (letter c above) + \$1,240,895 (letter d above) + \$18,000 (letter e above) + \$30,000 (letter f above) + \$75,000 (letter g above) = \$1,602,310 for the first 3 year period.

Total cost for resuscitation equipment for the cardiac catheterization lab for one level I STEMI center for annually thereafter - \$14,600 (letter a above) + \$37,925 (letter b above) + \$25,000 (letter c above) + \$401,500 (letter d above) + \$6,000 (letter e above) + \$10,000 (letter f above) + \$25,000 (letter g above) = \$520,025 for annually thereafter.

- 6) Resuscitation equipment for the intermediate care unit –
  - a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes - (laryngoscopes at least 2 X \$300 each = \$600 X one level I STEMI center X 3 years = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period) + (mechanical ventilator \$7000 X one level I STEMI center X 1 year (the first year) + \$1,500 for annual upkeep and maintenance of ventilator X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$10,000) for a total of \$49,300 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level I STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 1 year = \$12,500) + (mechanical ventilator \$1,500 annual upkeep and maintenance X one level I STEMI center X 1 year = \$1,500) for a total of \$14,600 annually thereafter.
  - b) Bag-mask resuscitator and sources of oxygen - (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period) + (air outlet \$70 X 7 = \$490 X one level I STEMI center X 1 year (the first year) + \$150 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2

through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level I STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$114,115 for the first 3 year period and (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 1 year = \$12,500) + (air outlet \$150 for annual upkeep and maintenance X one level I STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level I STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) for a total of \$37,925 annually thereafter.

- c) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level I STEMI center X 1 year = \$25,000 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X one level I STEMI center X 3 years = \$1,200,000 for the first 3 year period) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X one level I STEMI center X 1 year (the first year) + \$1,500 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period) for a total of \$1,240,895 for the first 3 year period and (telemetry \$800 X 500 patients = \$400,000 X one level I STEMI center X 1 year = \$400,000) + (\$1,500 for annual upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level I STEMI center X 1 year = \$1,500) for a total of \$401,500 annually thereafter.

- e) All standard intravenous fluids and administration devices and intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) for a total of \$18,000 for the first 3 year period (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- f) Drugs and supplies necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 100 patients = \$10,000 X one level I STEMI center X 3 years = \$30,000 for the first 3 year period and \$10,000 X one level I STEMI center X 1 year = \$10,000 annually thereafter.
- g) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level I STEMI center X 1 year = \$25,000 annually thereafter.

**Total cost for resuscitation equipment for one level I STEMI center for the intermediate care unit for the first 3 year period - \$49,300 (letter a above) + \$114,115 (letter b above) + \$75,000 (letter c above) + \$1,240,895 (letter d above) + \$18,000 (letter e above) + \$30,000 (letter f above) + \$75,000 (letter g above) = \$1,602,310 for the first 3 year period.**

**Total cost for resuscitation equipment for one level I STEMI center for the intermediate care unit for annually thereafter - \$14,600 (letter a above) + \$37,925 (letter b above) + \$25,000 (letter c above) + \$401,500 (letter d above) + \$6,000 (letter e above) + \$10,000 (letter f above) + \$25,000 (letter g above) = \$520,025 for annually thereafter.**

- 7) Resuscitation equipment for the radiology department -
  - a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level I STEMI center X 3 years = \$1,800 for the first 3 year period and at least 2 X \$300 each = \$600 X one level I STEMI center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period and \$250 for a pack of 10 X 50 X one

- level I STEMI center X 1 year = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period and \$250 for a pack of 10 X 50 packs X one level I STEMI center X 1 year = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level I STEMI center X 1 year (the first year) = \$490 for the first year + \$150 annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level I STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$76,615 for the first 3 year period and (air outlet \$70 X 7 = \$490 X one level I STEMI center X 1 year = \$490) + (regulator for air outlet \$35 X 25 = \$875 X one level I STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) for a total of \$25,765 for annually thereafter.
- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$50 X 500 X one level I STEMI center X 1 year = \$25,000 annually thereafter.
- f) Telemetry- average of \$800 X 500 patients = \$400,000 X one level I STEMI center X 3 years = \$1,200,000 for the first 3 year period and \$800 X 500 patients X one level I STEMI center X 1 year = \$400,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level I STEMI center = \$37,895 X one level I STEMI center X 1 year (first year) = \$37,895 for the first year + \$1,500 for the annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895

- for the first 3 year period and \$1,500 for the annual upkeep and maintenance X one level I STEMI center X 1 year = \$1,500 for annually thereafter.
- h) All standard administration devices - \$4.00 each X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period and \$2,000 X one level I STEMI center X 1 year = \$2,000 annually thereafter.
  - i) All standard intravenous catheters - \$4.00 each X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period and \$2,000 X one level I STEMI center X 1 year = \$2,000 annually thereafter.
  - j) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level I STEMI center X 3 years = \$150,000 for the first 3 year period and \$50,000 X one level I STEMI center X 1 year = \$50,000 annually thereafter.
  - k) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level I STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level I STEMI center for the radiology department for the first 3 year period - \$1,800 (letter a above) + \$37,500 (letter b above) + \$37,500 (letter c above) + \$76,615 (letter d above) + \$75,000 (letter e above) + \$1,200,000 (letter f above) + \$40,895 (letter g above) + \$6,000 (letter h above) + \$6,000 (letter i above) + \$150,000 (letter j above) + \$75,000 (letter k above) = \$1,706,310 for the first three year period.

Total cost for resuscitation equipment for one level I STEMI center for the radiology department for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,765 (letter d above) + \$25,000 (letter e above) + \$400,000 (letter f above) + \$1,500 (letter g above) + \$2,000 (letter h above) + \$2,000 (letter i above) + \$50,000 (letter j above) + \$25,000 (letter k above) = \$556,865 for annually thereafter.

- 8) Monitoring equipment to fully support the STEMI patient during the time the patient is physically present in the radiology department and during transportation to and from the radiology department - (\$1,800 each X 8 machines = \$14,400 X one level I STEMI center X 1 year (the first year) = \$14,400) + (\$150 for upkeep and maintenance X 8 machines X 2 years (years 2 through 3) X one level I STEMI center = \$2,400) for a total of \$16,800 for the first 3 year period and \$150 X 8 machines X 1 year X one level I STEMI Center = \$1,200 annually thereafter.
- 9) X-ray capability - (\$150,000 X 1 machine = \$150,000 X one level I STEMI center X 1 year (the first year) = \$150,000) + (\$500 for upkeep

and maintenance X 1 machine X 2 years (years 2 through 3) X one level I STEMI center) = \$1,000) for a total of \$151,000 for the first 3 year period and \$500 for upkeep and maintenance X 1 machine X 1 year X one level I STEMI center = \$500 annually thereafter.

- 10) In-house computerized tomography - \$1,000,000 average for CT machine = \$1,000,000 X one level I STEMI center X 1 year (the first year) = \$1,000,000 for the first year + \$200,000 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$400,000 for a total of \$1,400,000 for the first 3 year period and \$200,000 for annual upkeep and maintenance X one level I STEMI center X 1 year = \$200,000 annually thereafter.
- 11) Angiography with interventional capability for cardiac catheterization lab – average of \$1,000,000 X one level I STEMI center X 1 year (the first year) = \$1,000,000 for the first year + \$200,000 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$400,000 for a total of \$1,400,000 for the first 3 year period and \$200,000 for annual upkeep and maintenance X one level I STEMI center X 1 year = \$200,000 annually thereafter.
- 12) Operating rooms shall have at least the following equipment:
- a) Thermal control equipment for patient and resuscitation fluids - (temperature control devices \$2,750 each X 2 devices = \$5,500 X one level I STEMI center X 1 year (the first year) for a total of \$5,500 for the first year + \$2,750 X 1 device = \$2,750 for replacement X 2 years (years 2 through 3) X one level I STEMI center = \$5,500 for a total of \$11,000 for the first 3 year period) + (blankets \$270 pack of 10 X 50 = \$13,500 X one level I STEMI center X 3 years = \$40,500 for the first 3 year period) + (resuscitation fluids \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period) for a total of \$126,500 for the first 3 year period and (temperature control devices \$2,750 each X 1 device X 1 year = \$2,750 for replacement X one level I STEMI center = \$2,750) + (blankets \$270 pack of 10 X 50 = \$13,500 X one level I STEMI center X 1 year = \$13,500) + (resuscitation fluids \$50 X 500 patients = \$25,000 X one level I STEMI center X 1 year = \$25,000) for a total of \$41,250 for annually thereafter.
  - b) X-ray capability - (\$150,000 X one machine = \$150,000 X one level I STEMI center X 1 year (the first year) = \$150,000) + (\$500 for upkeep and maintenance X 1 machine X 2 years (years 2 through 3) X one level I STEMI center = \$1,000) for a total of \$151,000 for the first 3 year period and \$500 for upkeep and maintenance X 1 machine X 1 year X 1 level I STEMI center = \$500 annually thereafter.
  - c) Instruments and equipment necessary for cardiothoracic surgery capability – estimate of \$3,000 X one level I STEMI center X 3 years = \$9,000 for the first 3 year period and \$3,000



X one level I STEMI center X 1 year = \$3,000 annually thereafter.

- d) Patient Monitoring equipment - \$10,000 X 5 machines X one level I STEMI center X 1 year (the first year) = \$50,000 for the first year + \$500 for annual upkeep and maintenance X 5 machines X one level I STEMI center X 2 years (years 2 through 3) = \$5,000 for a total of \$55,000 for the first 3 year period and \$500 for annual upkeep and maintenance X 5 machines X one level I STEMI center X 1 year = \$2,500 annually thereafter.

Total cost for operating room equipment for one level I STEMI center for the first 3 year period- \$126,500 (letter a above) + \$151,000 (letter b above) + \$9,000 (letter c above) + \$55,000 (letter d above) = \$341,500 for the first three year period.

Total for operating room equipment for annually thereafter- \$41,250 (letter a above) + \$500 (letter b above) + \$3,000 (letter c above) + \$2,500 (letter d above) = \$47,250 annually thereafter.

**13) Resuscitation equipment available to the operating room.**

- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level I STEMI center X 3 years = \$1,800 for the first 3 year period and \$600 X one level I STEMI center X 1 year = \$600 annually thereafter.
- b) Endotracheal tubes of all sizes - 250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period and \$12,500 X one level I STEMI center X 1 year = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period and \$12,500 X one level I STEMI center X 1 year = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7= \$490 X one level I STEMI center X 1 year (the first year) = \$490 for the first year + air outlet annual upkeep and maintenance \$150 X one level I STEMI center X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level I STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500



patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$76,615 for the first 3 year period and (air outlet annual upkeep and maintenance \$150 X one level I STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level I STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level I STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) for a total of \$25,425 annually thereafter.

- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level I STEMI center X 1 year = \$25,000 annually thereafter.
- f) Telemetry - average of \$800 X 500 patients = \$400,000 X one level I STEMI center X 3 years = \$1,200,000 for the first 3 year period and \$400,000 X one level I STEMI center X 1 year = \$400,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level I STEMI center X 1 year (the first year) = \$37,895 + \$1,500 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for the annual upkeep and maintenance X one level I STEMI center X 1 year = \$1,500 annually thereafter.
- h) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) for a total of \$18,000 for the first 3 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- i) Drugs necessary for emergency care- e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate - \$100 X 500 patients = \$50,000 X one level I STEMI center X 3 years = \$150,000 for the

first 3 year period and \$100 X 500 patients X one level I STEMI center X 1 year = \$50,000 annually thereafter.

- j) Supplies necessary for emergency care (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) - \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$50 X 500 patients = \$25,000 X one level I STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level I STEMI center for the operating room for the first 3 year period - \$1,800 (letter a above) + \$37,500 (letter b above) + \$37,500 (letter c above) + \$76,615 (letter d above) + \$75,000 (letter e above) + \$1,200,000 (letter f above) + \$40,895 (letter g above) + \$18,000 (letter h above) + \$150,000 (letter i above) + \$75,000 (letter j above) = \$1,712,310 for the first 3 year period.

Total cost for resuscitation equipment for one level I STEMI center for the operating room for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,425 (letter d above) + \$25,000 (letter e above) + \$400,000 (letter f above) + \$1,500 (letter g above) + \$6,000 (letter h above) + \$50,000 (letter i above) + \$25,000 (letter j above) = \$558,525 for annually thereafter.

**14) Resuscitation equipment for the Post-Anesthesia Recovery room (PAR) -**

- a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes, bag-mask resuscitator, sources of oxygen and a mechanical ventilator - (laryngoscopes at least 2 X \$300 each = \$600 X one level I STEMI center X 3 years = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period) + (bag-mask resuscitator \$250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 3 years = \$37,500 for the first 3 year period) + (mechanical ventilator \$7000 X one level I STEMI center X 1 year (the first year) = \$7,000 + \$1,500 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$10,000 for the first 3 year period) + (air outlet \$70 X 7 = \$490 X one level I STEMI center X 1 year (the first year) = \$490 + \$150 for annual upkeep and maintenance X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator \$35 X 25 = \$875 X one level I STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 patients = \$1,050 X one level I STEMI center X 3 years =

\$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$163,415 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level I STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 1 year = \$12,500) + (bag-mask resuscitator \$250 for a pack of 10 X 50 = \$12,500 X one level I STEMI center X 1 year = \$12,500) + (mechanical ventilator \$1,500 for annual upkeep and maintenance X one level I STEMI center X 1 year = \$1,500) + (air outlet \$150 for annual upkeep and maintenance X one level I STEMI center X 1 year = \$150) + (regulator \$35 X 25 = \$875 X one level I STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level I STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 patients = \$1,050 X one level I STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level I STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level I STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level I STEMI center X 1 year = \$200) for a total of \$55,525 annually thereafter.

- b) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$50 X 500 patients X one level I STEMI center X 1 year = \$25,000 annually thereafter.
- c) Telemetry, electrocardiograph capability, cardiac monitor and defibrillator - (telemetry average \$800 X 500 patients = \$400,000 X one level I STEMI center X 3 years = \$1,200,000 for the first 3 year period) + (electrocardiograph, cardiac monitor and defibrillator \$37,895 X one level I STEMI center X 1 year (the first year) = \$37,895 for the first year + \$1,500 for annual upkeep and maintenance X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for electrocardiograph, cardiac monitor and defibrillator) for a total of \$1,240,895 for the first 3 year period and \$1,500 for annual upkeep and maintenance X one level I STEMI center X 1 year = \$1,500 + telemetry average \$800 X 500 patients = \$400,000 X one level I STEMI center X 1 year = \$400,000 for a total of \$401,500 annually thereafter.
- d) All standard intravenous fluids and administration devices, including intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard administration devices X 500 patients X one level I STEMI center X 3 years = \$6,000 for the first 3

- year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I STEMI center X 3 years = \$6,000 for the first 3 year period) for a total of \$18,000 for the first 3 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients X one level I STEMI center X 1 year = \$2,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level I STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- e) Drugs and supplies necessary for emergency care - saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level I STEMI center X 3 years = \$150,000 for the first 3 year period and \$50,000 X one level I STEMI center X 1 year = \$50,000 annually thereafter.
- f) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) - \$50 X 500 patients = \$25,000 X one level I STEMI center X 3 years = \$75,000 for the first 3 year period and \$50 X 500 patients = \$25,000 X one level I STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level I STEMI center for the post-anesthesia recovery room (PAR) for the first 3 year period - \$163,415 (letter a above) + \$75,000 (letter b above) + \$1,240,895 (letter c above) + \$18,000 (letter d above) + \$150,000 (letter e above) + \$75,000 (letter f above) = \$1,722,310 for the first 3 year period.

Total cost for resuscitation equipment for one level I STEMI center for the post-anesthesia recovery room (PAR) for annually thereafter - \$55,525 (letter a above) + \$25,000 (letter b above) + \$401,500 (letter c above) + \$6,000 (letter d above) + \$50,000 (letter e above) + \$25,000 (letter f above) = \$563,025 for annually thereafter.

**15) Laboratory Services-**

- a) Standard analyses of blood, urine and other body fluids - costs of materials \$200 X 500 patients = \$100,000 X one level I STEMI center X 3 years = \$300,000 for the first 3 year period and \$200 X 500 patients X one level I STEMI center X 1 year = \$100,000 annually thereafter.
- b) Blood typing and cross matching - centrifuge \$2000 X one level I STEMI center X 1 year (the first year) = \$2,000 + \$250 for the annual upkeep and maintenance of the centrifuge X one level I STEMI center X 2 years (years 2 through 3) = \$500 for a total of \$2,500 for the first 3 year period and \$250 for the annual upkeep and maintenance of the centrifuge X one level I STEMI center X 1 year = \$250 annually thereafter.

- c) Coagulation studies - \$200 materials X 250 patients = \$50,000 X one level I STEMI center X 3 years = \$150,000 for the first 3 year period and \$200 materials X 250 patients = \$50,000 X one level I STEMI center X 1 year = \$50,000 annually thereafter.
- d) Blood bank or access to a community central blood bank and adequate hospital blood storage facilities - at the least blood storage refrigerators 1 large refrigerator / use of community central blood bank at \$15,000 X one level I STEMI center X 1 year (the first year) = \$15,000 + \$1,500 for the annual upkeep and maintenance of the blood storage refrigerator X one level I STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$18,000 for the first 3 year period and \$1,500 for the annual upkeep and maintenance of the blood storage refrigerator X one level I STEMI center X 1 year = \$1,500 annually thereafter.
- e) Blood gases and pH determinations- at least 1 blood gas analyzer and kit \$3000 X one level I STEMI center X 3 years = \$9,000 for the first 3 year period and \$3,000 X one level I STEMI center X 1 year = \$3,000 annually thereafter.
- f) Blood chemistries - test and kits average of \$350 X 100 patients = \$35,000 X one level I STEMI center X 3 years = \$105,000 for the first 3 year period and \$350 X 100 patients X one level I STEMI center X 1 year = \$35,000 for annually thereafter.

**Total cost for laboratory services for one level I STEMI center for the first 3 year period - \$300,000 (letter a above) + \$ 2,500 (letter b above) + \$150,000 (letter c above) + \$18,000 (letter d above) + \$9,000 (letter e above) + \$105,000 (letter f above) = \$584,500 for the first 3 year period.**

**Total cost for laboratory services for one level I STEMI center for annually thereafter - \$100,000 (letter a above) + \$250 (letter b above) + \$50,000 (letter c above) + \$1,500 (letter d above) + \$3,000 (letter e above) + \$35,000 (letter f above) = \$189,750 annually thereafter.**

**Total cost for medical equipment for one level I STEMI center for the first 3 year period - \$3,600 (number 1 above) + \$1,170,885 (number 2 above) + \$1,506,210 (number 3 above) + \$12,379,750 (number 4 above) + \$1,602,310 (number 5 above) + \$1,602,310 (number 6 above) + \$1,706,310 (number 7 above) + \$16,800 (number 8 above) + \$151,000 (number 9 above) + \$1,400,000 (number 10 above) + \$1,400,000 (number 11 above) + \$341,500 (number 12 above) + \$1,712,310 (number 13 above) + \$1,722,310 (number 14 above) + \$584,500 (number 15 above) = \$27,299,795 for the first 3 year period.**

**Total cost for medical equipment for one level I STEMI center for annually thereafter - \$1,200 (number 1 above) + \$364,275 (number 2 above) + \$475,075 (number 3 above) + \$4,103,250 (number 4 above) + \$520,025 (number 5 above) + \$520,025 (number 6 above) + \$556,865 (number 7 above) + \$1,200 (number 8 above) + \$500 (number 9 above) + \$200,000**

(number 10 above) + \$200,000 (number 11 above) + \$47,250 (number 12 above) + \$558,525 (number 13 above) + \$563,025 (number 14 above) + \$189,750 (number 15 above) = \$8,300,965 for annually thereafter.

D. The STEMI center shall have support services to assist the patient's family from time of entry into the facility to time of discharge - at least 1 full time equivalent medical social worker \$66,000 annually X one level I STEMI center X 3 years = \$198,000 for the first 3 year period and \$66,000 X one level I STEMI center X 1 year = \$66,000 annually thereafter.

E. The STEMI center shall have cardiac rehabilitation or a written network agreement for the provision of cardiac rehabilitation - at least 2 registered nurses X \$67,623 annually X one level I STEMI center X 3 years = \$405,738 for the first 3 year period and \$67,623 X 2 registered nurses X one level I STEMI center X 1 year = \$135,246 annually thereafter.

F. Courses/conferences every 2 years focused on cardiovascular disease for program manager.

- 1) National or international STEMI course or conference - (\$1200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level I STEMI center X 3 years = \$0 for the first 3 year period and \$2,950 X no level I STEMI center X 1 year = \$0 annually thereafter.
- 2) Regional STEMI course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level I STEMI center X 3 years = \$5,250 for the first 3 year period and \$1,750 X one level I STEMI center X 1 year = \$1,750 annually thereafter.
- 3) State STEMI course or conference - (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level I STEMI center X 3 years = \$0 for the first 3 year period and \$1,150 X no level I STEMI center X 1 year = \$0 annually thereafter.

G. STEMI registry.

- 1) Computer with internet capability/access \$600 computer + internet fee \$100/month \$1,200 annually X one level I STEMI center X 3 years = \$5,400 for the first 3 year period and \$1,800 X one level I STEMI center X 1 year = \$1,800 annually thereafter.
- 2) Patient registrar - \$36,258 annually X one level I STEMI center X 3 years = \$108,774 for the first 3 year period and \$36,258 X one level I STEMI center X 1 year = \$36,258 annually thereafter.
- 3) Training to set up STEMI registry system/program for data entry - \$200 annually X one level I STEMI center X 3 years =

\$600 for the first 3 year period and \$200 X one level I STEMI center X 1 year = \$200 annually thereafter.

- H. Public education program to promote STEMI prevention and awareness of signs and symptoms- e.g. community health fairs costs of printing and advertisement costs (posters, brochures etc...) \$350 for each health fair x 12 health fairs annually = \$4,200 annually X one level I STEMI center X 3 years = \$12,600 for the first 3 year period and \$4,200 X one level I STEMI center X 1 year = \$4,200 annually thereafter.
- I. Patient education program to promote STEMI prevention and STEMI symptoms awareness - printing costs of brochures etc... \$500 annually X one level I STEMI center X 3 years = \$1,500 for the first 3 year period and \$500 X one level I STEMI center X 1 year = \$500 annually thereafter.
- J. Professional education outreach program in catchment areas to provide training and other supports to improve care of STEMI patients - e.g. hospitals sponsor at least 1 conference per year within their service area at the cost of \$2000 annually X one level I STEMI center X 3 years = \$6,000 for the first 3 year period and \$2,000 X one level I STEMI center X 1 year = \$2,000 annually thereafter.
- K. STEMI centers shall be actively involved in local and regional EMS systems by providing training and clinical educational resources - hospitals sponsor at least 1 conference per year within their area for EMS at the cost of \$2,000 annually X one level I STEMI center X 3 years = \$6,000 for the first 3 year period and \$2,000 X one level I STEMI center X 1 year = \$2,000 annually thereafter.
- L. Report of findings presented at regional, state or national meetings – (\$500 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250)= \$1,550 X one level I STEMI center X 3 years = \$4,650 for the first 3 year period and \$1,550 X one level I STEMI center X 1 year = \$1,550 annually thereafter.
- M. A lighted designated helicopter landing area at the STEMI center to accommodate incoming medical helicopters which shall be cordoned off at all times from the general public. The STEMI center shall also have a landing area on the hospital premises no more than 3 minutes from the emergency room - (construction of helipad estimate of \$36,000 X 1 helipad X one level I STEMI center X 1 year (the first year) = \$36,000) + (maintenance and upkeep of helipad \$2,000 X 2 years (years 2 through 3) X one level I STEMI center = \$4,000) for a total of \$40,000 for the first 3 year period for the helipad + (cordoning barrier \$4,300 X 1 year (the first year) X one level I STEMI center = \$4,300) + \$500 for maintenance and upkeep of the cordoning barrier X 2 years (years 2 through 3) X one level I STEMI center = \$1,000) for a total of \$5,300 for the first 3 year period for the cordoning barrier for a total of \$45,300 for the first 3 year period and \$2,000 for maintenance and upkeep of helipad + \$500 for



**maintenance and upkeep of the cordoning barrier = \$2,500 X 1 year X  
one level I STEMI center = \$2,500 annually thereafter.**

**Final numbers for one level I STEMI center for the first 3 year  
period - [\$28,402,965 letter A] + [\$4,979.37 letter B] + [\$27,299,795  
letter C] + [\$198,000 letter D] + [\$405,738 letter E] + [\$5,250 letter  
F] + [\$114,774 letter G] + [\$12,600 letter H] + [\$1,500 letter I ] +  
[\$6,000 letter J] + [\$6,000 letter K] + [\$4,650 letter L] + [\$45,300  
letter M] = \$56,507,551 for the first 3 year period.**

**Final numbers for one level I STEMI center for annually  
thereafter - [\$9,467,655 letter A] + [\$1,659.79 letter B] + [8,300,965  
letter C] + [\$66,000 letter D] + [\$135,246 letter E] + [\$1,750 letter  
F] + [\$38,258 letter G] + [\$4,200 letter H] + [\$500 letter I] +  
[\$2,000 letter J] + [\$2,000 letter K] + [\$1,550 letter L] + [\$2,500  
letter M] = \$18,024,283 for annually thereafter.**

**It is expected that 3 level I STEMI centers will be designated during the first 3 year  
period (\$169,522,653) and those same level I STEMI centers will be designated again  
at some time (3 year intervals) annually thereafter (\$54,072,849).**

## **2. Level II STEMI centers.**

### **A. Salary costs for medical professionals.**

- 1) A physician experienced in diagnosing and treating cardiovascular  
disease - \$359,000 annually X one level II STEMI center = \$359,000 X  
3 years = \$1,077,000 for the first 3 year period and \$359,000 annually  
X one level II STEMI center X 1 year = \$359,000 annually thereafter.**
- 2) At least 1 other health care professional or qualified individual  
credentialed in STEMI care - \$126,046 annually X one level II  
STEMI center = \$126,046 X 3 years = \$378,138 for the first 3 year  
period and \$126,046 annually X one level II STEMI center X 1 year =  
\$126,046 annually thereafter.**
- 3) Interventional Cardiologist - \$359,000 annually X one level II STEMI  
center for the first 3 year period = \$359,000 X 3 years = \$1,077,000  
for the first 3 year period and \$359,000 X one level II STEMI center  
X 1 year = \$359,000 annually thereafter.**
- 4) Other health care professional as deemed necessary in the cardiac  
catheterization laboratory - \$59,750 annually X one level II STEMI  
center = \$59,750 X 3 years = \$179,250 for the first 3 year period and  
\$59,750 annually X one level II STEMI center X 1 year = \$59,750  
annually thereafter.**
- 5) STEMI center medical director who shall be a cardiologist or  
interventional cardiologist - \$359,000 annually X one level II STEMI  
center = \$359,000 X 3 years = \$1,077,000 for the first 3 year period  
and \$359,000 annually X one level II STEMI center X 1 year =  
\$359,000 annually thereafter.**



- 6) STEMI program manager/coordinator who is a registered nurse or a qualified individual - \$126,046 annually X one level II STEMI center = \$126,046 X 3 years = \$378,138 for the first 3 year period and \$126,046 annually X one level II STEMI center X 1 year = \$126,046 annually thereafter.
- 7) Physician to direct cardiac rehabilitation services trained in cardiac rehabilitation - \$200,339 annually X one level II STEMI center = \$200,339 X 3 years = \$601,017 for the first 3 year period and \$200,339 annually X one level II STEMI center X 1 year = \$200,339 annually thereafter.
- 8) Cardiologist - \$359,000 annually X one level II STEMI center = \$359,000 X 3 years = \$1,077,000 for the first 3 year period and \$359,000 X one level II STEMI center X 1 year = \$359,000 annually thereafter.
- 9) Cardiothoracic surgeon - \$403,993 annually X one level II STEMI center = \$403,993 X 3 years = \$1,211,979 for the first 3 year period and \$403,993 annually X one level II STEMI center X 1 year = \$403,993 annually thereafter.
- 10) An internal medicine physician - \$181,823 annually X one level II STEMI center = \$181,823 X 3 years = \$545,469 for the first 3 year period and \$181,823 annually X one level II STEMI center X 1 year = \$181,823 annually thereafter.
- 11) A diagnostic radiologist - \$402,539 annually X one level II STEMI center = \$402,539 X 3 years = \$1,207,617 for the first 3 year period and \$402,539 annually X one level II STEMI center X 1 year = \$402,539 annually thereafter.
- 12) An anesthesiologist - \$331,932 annually X one level II STEMI center for the first 3 year period = \$331,932 X 3 years = \$995,796 for the first 3 year period and \$331,932 annually X one level II STEMI center X 1 year = \$331,932 annually thereafter.
- 13) Anesthesiology resident- \$61,000 annually X one level II STEMI center = \$61,000 X three years = \$183,000 for the first 3 year period and \$61,000 annually X one level II STEMI center X 1 year = \$61,000 annually thereafter.
- 14) Certified nurse anesthetists - \$155,095 annually X one level II STEMI center = \$155,095 X three years = \$465,285 for the first 3 year period and \$155,095 annually X one level II STEMI center X 1 year = \$155,095 annually thereafter.
- 15) Anesthesia assistants - \$120,000 annually X one level II STEMI center = \$120,000 X 3 years = \$360,000 for the first 3 year period and \$120,000 X one level II STEMI center X 1 year = \$120,000 annually thereafter.
- 16) Emergency department physician credentialed for STEMI care by the STEMI center 24 hours a day, 7 days a week - \$244,973 annually X 3 emergency department physicians X one level II STEMI center = \$734,919 X 3 years = \$2,204,757 for the first 3 year period and \$244,973 annually X 3 physicians X one level II STEMI center X 1 year = \$734,919 annually thereafter.
- 17) Registered nurses in the emergency department - \$64,533 annually X 5 registered nurses in the emergency department = \$322,665 X one

- level II STEMI center = \$322,665 X 3 years = \$967,995 for the first 3 year period and \$322,665 X one level II STEMI center X 1 year = \$322,665 annually thereafter.
- 18) Medical director of the emergency department - \$199,038 annually X one level II STEMI center = \$199,038 X 3 years = \$597,114 for the first 3 year period and \$199,038 X one level II STEMI center X 1 year = \$199,038 annually thereafter.
- 19) A medical director for a designated intensive care unit - \$177,560 annually X one level II STEMI center = \$177,560 X 3 years = \$532,680 for the first 3 year period and \$177,560 annually X one level II STEMI center X 1 year = \$177,560 annually thereafter.
- 20) A physician on duty or available 24 hours a day 7 days a week in the designated intensive care unit - \$244,553 annually X 3 STEMI center intensive care unit physicians X one level II STEMI center = \$733,659 X 3 years = \$2,200,977 for the first 3 year period and \$244,553 annually X 3 STEMI center intensive care unit physicians = \$733,659 annually X one level II STEMI center X 1 year = \$733,659 annually thereafter.
- 21) The designated intensive care unit shall have a 1 to 1 or 1 to 2 registered nurse/patient ratio used for critically ill patients requiring intensive care unit level of care - \$67,623 annually X 5 registered nurses in the designated intensive care unit = \$338,115 X one level II STEMI center = \$338,115 X 3 years = \$1,014,345 for the first 3 year period and \$67,623 X 5 registered nurses = \$338,115 annually X one level II STEMI centers X 1 year = \$338,115 annually thereafter.
- 22) Intermediate care unit medical director - \$177,560 annually X one level II STEMI center = \$177,560 X 3 years = \$532,680 for the first 3 year period and \$177,560 annually X one level II STEMI center X 1 year = \$177,560 annually thereafter.
- 23) Physician on duty or available 24 hours a day, 7 days a week in the intermediate care unit - \$177,560 annually X 3 physicians in the intermediate unit - \$532,680 X one level II STEMI center = \$532,680 X 3 years = \$1,598,040 for the first 3 year period and \$177,560 annually X 3 physicians = \$532,680 annually X one level II STEMI center X 1 year = \$532,680 annually thereafter.
- 24) The intermediate care unit shall have registered nurses and other essential personnel on duty 24 hours a day 7 days a week - \$65,097 annually for the registered nurse X 4 registered nurses in the intermediate care unit = \$260,388 X one level II STEMI center = \$260,388 X 3 years = \$781,164 for the first 3 year period and \$65,097 X 4 registered nurses = \$260,388 annually X one level II STEMI center X 1 year = \$260,388 annually thereafter.
- 25) Certified Nursing Technician - \$30,000 annually X one level II STEMI center = \$30,000 X 3 years = \$90,000 for the first 3 year period and \$30,000 annually X one level II STEMI center X 1 year = \$30,000 annually thereafter.
- 26) The STEMI center post-anesthesia recovery room shall have registered nurses and other essential personnel on call and available within 60 minutes 24 hours a day 7 days a week - \$65,097 annually X 4 registered nurses = \$260,388 X one level II STEMI center =

- \$260,388 X 3 years = \$781,164 for the first 3 year period and \$65,097 X 4 registered nurses = \$260,388 annually X one level II STEMI centers X 1 year = \$260,388 annually thereafter.
- 27) Computerized tomography technician - \$58,895 annually X 4 computerized tomography technicians = \$235,580 X one level II STEMI center = \$235,580 X 3 years = \$706,740 for the first 3 year period and \$58,895 X 4 computerized tomography technicians = \$235,580 X one level II STEMI center X 1 year = \$235,580 annually thereafter.
- 28) Radiologist - average \$300,000 annually X 3 neurologist/radiologists = \$900,000 X one level II STEMI center = \$900,000 X 3 years = \$2,700,000 for the first 3 year period and \$300,000 X 3 neurologists/radiologists = \$900,000 annually X one level II STEMI center X 1 year = \$900,000 annually thereafter.
- 29) Transport nurse - average \$62,000 annually X one level II STEMI center = \$62,000 X 4 transport nurses = \$248,000 X 3 years = \$744,000 for the first 3 year period and \$62,000 annually X 4 transport nurses X one level II STEMI centers X 1 year = \$248,000 annually thereafter.
- 30) Radiology technician - average \$62,000 annually X 4 radiology technicians = \$248,000 X one level II STEMI center = \$248,000 X 3 years = \$744,000 for the first 3 year period and \$62,000 annually X 4 radiology technicians X one level II STEMI center X 1 year = \$248,000 annually thereafter.
- 31) Scrub nurse - \$68,655 annually X 4 scrub nurses = \$274,620 X one level II STEMI center = \$274,620 X 3 years = \$823,860 for the first 3 year period and \$68,655 X 4 scrub nurses = \$274,620 annually X one level II STEMI center X 1 year = \$274,620 annually thereafter.
- 32) Clinical perfusionist - \$111,420 annually X one level II STEMI center = \$111,420 X 3 years = \$334,260 for the first 3 year period and \$111,420 annually X one level II STEMI center X 1 year = \$111,420 annually thereafter.
- 33) Nurse educator/supervisor to ensure staff are trained on core competencies - \$78,500 annually X one level II STEMI center = \$78,500 X 3 years = \$235,500 for the first 3 year period and \$78,500 annually X one level II STEMI center X 1 year = \$78,500 annually thereafter.

Total costs for salaries of medical professionals for one level II STEMI center for the first 3 year period - \$1,077,000 (#1 above) + \$378,138 (#2 above) + \$1,077,000 (#3 above) + \$179,250 (#4 above) + \$1,077,000 (#5 above) + \$378,138 (#6 above) + \$601,017 (#7 above) + \$1,077,000 (#8 above) + \$1,211,979 (#9 above) + \$545,469 (#10 above) + \$1,207,617 (#11 above) + \$995,796 (#12 above) + \$183,000 (#13 above) + \$465,285 (#14 above) + \$360,000 (#15 above) + \$2,204,757 (#16 above) + \$967,995 (#17 above) + \$597,114 (#18 above) + \$532,680 (#19 above) + \$2,200,977 (#20 above) + \$1,014,345 (#21 above) + \$532,680 (#22 above) + \$1,598,040 (#23 above) + \$781,164 (#24 above) + \$90,000 (#25 above) + \$781,164 (#26 above) + \$706,740 (#27 above) + \$2,700,000 (#28 above) + \$744,000 (#29 above) + \$744,000 (#30

above) + \$823,860 (#31 above) + \$334,260 (#32 above) + \$235,500 (#33 above) = \$28,402,965 for the first 3 year period.

Total cost for salaries of medical professionals for annually thereafter - \$359,000 (#1 above) + \$126,046 (#2 above) + \$359,000 (#3 above) + \$59,750 (#4 above) + \$359,000 (#5 above) + \$126,046 (#6 above) + \$200,339 (#7 above) + \$359,000 (#8 above) + \$403,993 (#9 above) + \$181,823 (#10 above) + \$402,539 (#11 above) + \$331,932 (#12 above) + \$61,000 (#13 above) + \$155,095 (#14 above) + \$120,000 (#15 above) + \$734,919 (#16 above) + \$322,665 (#17 above) + \$199,038 (#18 above) + \$177,560 (#19 above) + \$733,659 (#20 above) + \$338,115 (#21 above) + \$177,560 (#22 above) + \$532,680 (#23 above) + \$260,388 (#24 above) + \$30,000 (#25 above) + \$260,388 (#26 above) + \$235,580 (#27 above) + \$900,000 (#28 above) + \$248,000 (#29 above) + \$248,000 (#30 above) + \$274,620 (#31 above) + \$111,420 (#32 above) + \$78,500 (#33 above) = \$9,467,655 for annually thereafter.

**B. Continuing education costs for level II STEMI center staff.**

- 1.) Level II core team member of the STEMI call roster, usually the STEMI medical director, shall complete a minimum of 10 hours of continuing education in the area of acute coronary syndrome every year – average of \$10.00 per hour for online training X 10 hours = \$100 X one level II STEMI center X 3 years = \$300 for the first 3 year period and \$10.00 per hour X 10 hours X one level II STEMI center X 1 year = \$100 annually thereafter.
- 2.) Level II core team member of the STEMI call roster, usually the STEMI program manager/coordinator, shall complete a minimum of ten hours of continuing education in the area of acute coronary syndrome every year – average of \$39.99 annually for online training X one level II STEMI center X 3 years = \$119.97 for the first 3 year period and \$39.99 X one level II STEMI center X 1 year = \$39.99 annually thereafter.
- 3.) Level II STEMI call roster member (emergency department physician) shall complete minimum average of 10 hours of continuing education in the area of cardiovascular disease every year- average of \$10.00 per hour for online training X 10 hours X one level II STEMI center X 3 years = \$300 for the first 3 year period and \$10.00 per hour X 10 hours X one level II STEMI center X 1 year = \$100 annually thereafter.
- 4.) Level II STEMI call roster member (interventional cardiologist) shall complete minimum average of 10 hours of continuing education in the area of cardiovascular disease every year - average of \$10.00 per hour for online training X 10 hours X one level II STEMI center X 3 years = \$300 for the first 3 year period and \$10.00 X 10 hours X one level II STEMI center X 1 year = \$100 annually thereafter.
- 5.) Level II STEMI call roster members (others as appropriate) shall complete minimum average of 10 hours of continuing education in the area of cardiovascular disease every year - average of \$10.00

per hour for online training X 10 hours X one level II STEMI center X 3 years = \$300 annually X 3 others as appropriate = \$900 for the first 3 year period and \$10.00 per hour X 10 hours X one level II STEMI center X 1 year = \$100 X 3 others as appropriate = \$300 annually thereafter.

- 6.) A level II STEMI center medical director shall complete a minimum of 10 hours of continuing medical education every year in the area of acute coronary syndrome - average of \$10.00 per hour for online training X 10 hours X one level II STEMI center X 3 years = \$300 for the first 3 year period and \$10.00 X 10 hours X one level II STEMI center X 1 year = \$100 annually thereafter.
- 7.) A level II program manager/coordinator shall complete a minimum of 8 hours of continuing education every year in the area of cardiovascular disease - average of \$39.99 annually for online training = \$39.99 X one level II STEMI center X 3 years = \$119.97 for the first 3 year period and \$39.99 X one level II STEMI center X 1 year = \$39.99 annually thereafter.
- 8.) Emergency department physicians in level II STEMI centers shall complete a minimum average of 4 hours of continuing medical education in the area of cardiovascular disease every year - average of \$10.00 per hour for online training X 3 physicians in the emergency room X 4 hours X one level II STEMI center X 3 years = \$360 for the first 3 year period and \$10.00 X 3 physicians X 4 hours X one level II STEMI center X 1 year = \$120 annually thereafter.
- 9.) Registered nurses assigned to the emergency department in level II STEMI centers shall complete a minimum of 4 hours of continuing education in the area of cardiovascular disease every year - average of \$39.99 annually for online training = \$39.99 X 5 registered nurses in the emergency room X one level II STEMI center X 3 years = \$599.85 for the first 3 year period and \$39.99 X 5 registered nurses in the emergency room X one level II STEMI centers X 1 year = \$199.95 annually thereafter.
- 10.) Registered nurses assigned to the intensive care unit in level II STEMI centers who provide care to STEMI patients shall complete a minimum of 8 hours of continuing education in the area of cardiovascular disease every year - average of \$39.99 annually for online training X 4 registered nurses in the intensive care unit X one level II STEMI center X 3 years = \$479.88 for the first 3 year period and \$39.99 annually X 4 registered nurses in the intensive care unit X one level II STEMI center X 1 year = \$159.96 annually thereafter.
- 11.) Registered nurses and clinical staff assigned to the cardiac catheterization lab in level II STEMI centers shall complete a minimum of 8 hours of continuing education in the area of acute coronary syndrome every year - average of \$39.99 annually X 4 registered nurses and clinical staff assigned to the cardiac catheterization lab X one level II STEMI center X 3 years = \$479.88 for the first 3 year period and \$39.99 X 4 registered nurses

and clinical staff assigned to the cardiac catheterization lab X one level II STEMI center X 1 year = \$159.96 annually thereafter.

- 12.) Registered nurses assigned to the intermediate care unit in level II STEMI centers shall complete a minimum of 8 hours of continuing education in the area of cardiovascular disease every year – average of \$39.99 annually X 4 registered nurses assigned to the intermediate care unit X one level II STEMI center X 3 years = \$479.88 for the first 3 year period and \$39.99 X 4 registered nurses assigned to the intermediate care unit X one level II STEMI center X 1 year = \$159.96 annually thereafter.

Total cost for continuing education for medical staff of one level II STEMI center for the first 3 year period - \$300 (#1 above) + \$119.97 (#2 above) + \$300 (#3 above) + \$300 (#4 above) + \$900 (#5 above) + \$300 (#6 above) + \$119.97 (#7 above) + \$360 (#8 above) + \$599.85 (#9 above) + \$479.88 (#10 above) + \$479.88 (#11 above) + \$479.88 (#12 above) = \$4,739.43 for the first 3 year period.

Total cost for continuing education for medical staff of one level II STEMI center for annually thereafter - \$100 (#1 above) + \$39.99 (#2 above) + \$100 (#3 above) + \$100 (#4 above) + \$300 (#5 above) + \$100 (#6 above) + \$39.99 (#7 above) + \$120 (#8 above) + \$199.95 (#9 above) + \$159.96 (#10 above) + \$159.96 (#11 above) + \$159.96 (#12 above) = \$1,579.81 for annually thereafter.

### C. Medical Equipment.

- 1) Electronic communication devices for STEMI/cardiac catheterization lab team members - 2 electronic communication devices (cell phone and beeper/pager) X \$300 for the annual cost of each electronic communication device X 2 STEMI/cardiac catheterization lab team members carrying this device (1 member on call and 1 back-up member) X 3 years X one level II STEMI center = \$3,600 for the first 3 year period and 2 electronic communication devices (cell phone and beeper/pager) X \$300 for the annual cost of each electronic communication device X 2 STEMI/cardiac catheterization lab team members carrying this device (1 member on call and 1 back-up member) X one level II STEMI center X 1 year = \$1,200 annually thereafter.
- 2) Resuscitation equipment for the emergency department -
  - a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level II STEMI center = \$600 x 3 years = \$1,800 for the first 3 year period and at least 2 X \$300 each = \$600 X one level II STEMI center = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period and \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center = \$12,500 annually thereafter.

- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period and \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 for the first year X one level II STEMI center = \$490 + \$150 per year X 2 years (years 2 through 3) for upkeep and maintenance of air outlets X one level II STEMI center = \$300 for a total of \$790 for air outlets for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X 3 years X one level II STEMI center = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X 3 years X one level II STEMI center = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X 3 years X one level II STEMI center = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X 3 years X one level II STEMI center = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 3 years X one level II STEMI center = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X 3 years X one level II STEMI center = \$600 for the first 3 year period) for a total of \$73,990 for the first 3 year period and (air outlet upkeep and maintenance \$150 X one level II STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 15 X one level II STEMI center X 1 year = \$525) + (nasal cannula \$.40 X 500 patients X one level II STEMI center X 1 year = \$200) + (masks \$2.40 X 500 X one level II STEMI centers X 1 year = \$1,200) + (ambu bags \$10.50 X 100 X one level II STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 X one level II STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 X one level II STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients X one level II STEMI center X 1 year = \$200) for a total of \$25,075 annually thereafter.
- e) Mechanical ventilator - \$7000 X one level II STEMI center = \$7,000 for the first year and \$1,500 for the annual upkeep and maintenance in the future of one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for 2 years for a total of \$10,000 for the first 3 year period and \$1,500 for the upkeep and maintenance for one level II STEMI center X 1 year = \$1,500 annually thereafter.
- f) Suction devices - suction device canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II STEMI center = \$25,000 X 3 years = \$75,000 for the first 3 year period and \$50 X 500 patients X one level II STEMI center = \$25,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 for the cost of the first year X one level II STEMI center = \$37,895 + \$1,500 for the annual upkeep and maintenance of one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for upkeep and maintenance X one level II STEMI center X 1 year = \$1,500 annually thereafter.



- h) Central line insertion equipment - \$600 X 300 patients = \$180,000 X one level II STEMI center = \$180,000 X three years = \$540,000 for the first 3 year period and \$600 X 300 patients = \$180,000 X one level II STEMI center X one year = \$180,000 annually thereafter.**
- i) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 = \$2,000) = \$6,000 X one level II STEMI center = \$6,000 X 3 years = \$18,000 for the first 3 year period and \$6,000 X one level II STEMI center X 1 year = \$6,000 annually thereafter.**
- j) Intraosseous devices-needles - \$25 each X 300 patients = \$7,500 X one level II STEMI center = \$7,500 X 3 years = \$22,500 for the first 3 year period and \$25 each X 300 patients = \$7,500 X one level II STEMI center X 1 year = \$7,500 annually thereafter.**
- k) Drugs necessary for STEMI emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 = \$50,000 X one level II STEMI center = \$50,000 X 3 years = \$150,000 for the first 3 year period and \$100 X 500 = \$50,000 X one level II STEMI center X 1 year = \$50,000 annually thereafter.**
- l) Two-way communication link with emergency medical service vehicles/equipment necessary to communicate with emergency medical services regarding prehospital ECG STEMI findings - \$1,200 each X one level II STEMI center = \$1,200 for the first year + \$200 for upkeep and maintenance for one level II STEMI center X 2 years (years 2 through 3) = \$400 for a total of \$1,600 for the first 3 year period and \$200 for upkeep and maintenance X one level II STEMI center X 1 year = \$200 annually thereafter.**
- m) End-tidal carbon dioxide monitor - \$3,900 X one level II STEMI center = \$3,900 for the first year and \$1,500 for the annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$6,900 for the first 3 year period and \$1,500 for the annual upkeep and maintenance X one level II STEMI center X 1 year = \$1,500 annually thereafter.**
- n) Temperature control devices for patient and resuscitation fluids - \$270 pack of 10 (Bair Hugger Therapy) X 30 = \$8,100 X one level II STEMI center X 3 years = \$24,300 for the first 3 year period and \$270 pack of 10 (Bair Hugger Therapy) X 30 = \$8,100 X one level II STEMI center = \$8,100 annually thereafter.**
- o) External pacemaker - \$10 per set for pacer electrodes average cost (this will be used with the cardiac defibrillator already accounted for in g above) X 30 = \$300 X one level II STEMI center X 3 years = \$900 for the first 3 year period and \$10 per set X 30 = \$300 X one level II STEMI center X 1 year = \$300 annually thereafter.**



- p) Transvenous pacemaker - \$200 average cost of pacer wires and equipment X 30 = \$6,000 X one level II STEMI center X 3 years = \$18,000 + generator cost \$7,000 X 5 generators = \$35,000 for the first year + \$1,000 X 2 years (years 2 through 3) for maintenance and upkeep of generators for a total of \$37,000 for the generators and a total of \$55,000 for the first 3 year period and \$200 average cost X 30 = \$6,000 + \$1,000 for the maintenance and upkeep of the generator = \$7,000 X one level II STEMI center X 1 year = \$7,000 annually thereafter.
- q) Supplies necessary for STEMI emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II STEMI center for the emergency room department for the first 3 year period - \$1,800 (letter a above) + \$37,500 (letter b above) + \$37,500 (letter c above) + \$73,990 (letter d above) + \$10,000 (letter e above) + \$75,000 (letter f above) + \$40,895 (letter g above) + \$540,000 (letter h above) + \$18,000 (letter i above) + \$22,500 (letter j above) + \$150,000 (letter k above) + \$1,600 (letter l above) + \$6,900 (letter m above) + \$24,300 (letter n above) + \$900 (letter o above) + \$55,000 (letter p above) + \$75,000 (letter q above) = \$1,170,885 for the first 3 year period.

Total cost for resuscitation equipment for one level II STEMI center for the emergency room department for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,075 (letter d above) + \$1,500 (letter e above) + \$25,000 (letter f above) + \$1,500 (letter g above) + \$180,000 (letter h above) + \$6,000 (letter i above) + \$7,500 (letter j above) + \$50,000 (letter k above) + \$200 (letter l above) + \$1,500 (letter m above) + \$8,100 (letter n above) + \$300 (letter o above) + \$7,000 (letter p above) + \$25,000 (letter q above) = \$364,275 for annually thereafter.

- 3) Resuscitation equipment for the intensive care unit -
- a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes, bag-mask resuscitator, and a mechanical ventilator - (laryngoscopes at least 2 X \$300 each = \$600 X 3 years X one level II STEMI center = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 packs = \$12,500 X 3 years X one level II STEMI center = \$37,500 for the first 3 year period) + (bag-mask resuscitator \$250 for a pack of 10 X 50 packs X 3 years X one level II STEMI center = \$37,500 for the first 3 year period) + (mechanical ventilator \$7000 X one level II STEMI center X 1 year (the first year) = \$7,000 + \$1,500 for the upkeep and maintenance of ventilator X 2 years (years 2 through 3) X one level II STEMI center = \$3,000 for a total of \$10,000 for the first 3 year period) for a total of \$86,800

for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level II STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 1 year = \$12,500) + (bag-mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 1 year = \$12,500) + (mechanical ventilator \$1500 for upkeep and maintenance X one level II STEMI center X 1 year = \$1,500) for a total of \$27,100 annually thereafter.

- b) Oxygen source with concentration controls - (air outlet \$70 X 7 = \$490 X one level II STEMI center X 1 year (the first year) = \$490 + \$150 for upkeep and maintenance of air outlets X 2 years (years 2 through 3) X one level II STEMI center = \$300 for a total of \$790 for the first 3 year period) + (regulator \$35 X 25 = \$875 X 3 years X one level II STEMI center = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 = \$200 X 3 years X one level II STEMI center = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X 3 years X one level II STEMI center = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X 3 years X one level II STEMI center = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X 3 years X one level II STEMI center = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 3 years X one level II STEMI center = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X 3 years X one level II STEMI center = \$600 for the first 3 year period) for a total of \$76,615 for the first 3 year period and (air outlet upkeep and maintenance = \$150 X one level II STEMI center X 1 year = \$150) + (regulator \$35 X 25 = \$875 X one level II STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 = \$200 X one level II STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center = \$200) for a total of \$25,425 annually thereafter.
- c) Cardiac emergency cart, including medications - \$1600 cart + medications and suction devices \$1000 = \$2,600 X one level II STEMI center X 1 year (the first year) = \$2,600 + \$1,000 medications X 2 years (years 2 through 3) X one level II STEMI center = \$2,000 for a total of \$4,600 for the first 3 year period and \$1,000 medications and suction devices X one level II STEMI center X 1 year = \$1,000 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X 3 years X one level II STEMI center = \$1,200,000) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X 1 year (first year) X one level II STEMI center = \$37,895 + \$1,500 X 2 years (years 2

through 3) X one level II STEMI center = \$3,000 for a total of \$40,895) for a total of \$1,240,895 for the first 3 year period and (telemetry \$800 X 500 patients = \$400,000 X one level II STEMI center X 1 year = \$400,000) + (\$1,500 for upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level II STEMI center X 1 year = \$1,500) for a total of \$401,500 for one level II STEMI center annually thereafter.

- e) Electronic pressure monitoring and pulse oximetry - (electronic pressure monitoring devices \$100 X 25 = \$2,500 X 3 years X one level II STEMI center = \$7,500) + (pulse oximetry devices \$100 X 25 = \$2,500 X 3 years X one level II STEMI center = \$7,500) for a total of \$15,000 for the first 3 year period and electronic pressure monitoring devices \$100 X 25 X one level II STEMI center = \$2,500 + pulse oximetry devices \$100 X 25 X one level II STEMI center = \$2,500 for a total of \$5,000 annually thereafter.
- f) End-tidal carbon dioxide monitor - \$3,900 X one level II STEMI center X 1 year (first year) = \$3,900 for the first year + \$1,500 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$6,900 for the first 3 year period and \$1,500 X one level II STEMI center X 1 year = \$1,500 annually thereafter.
- g) Patient weight devices - \$1000 X one level II STEMI center X 1 year (the first year) = \$1,000 + \$250 annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$500 for a total of \$1,500 for the first 3 year period and \$250 X one level II STEMI center X 1 year = \$250 annually thereafter.
- h) Drugs, intravenous fluids and supplies - (drugs are already accounted for in letter d above) (all standard intravenous fluids \$4.00 each X 500 patients = \$2,000 X 3 years X one level II STEMI center = \$6,000) + (all standard administration devices \$4.00 each X 500 patients = \$2,000 X 3 years X one level II STEMI center = \$6,000) + (all standard intravenous catheters \$4.00 each X 500 patients = \$2,000 X 3 years X one level II STEMI center = \$6,000) for a total of \$18,000 for the first 3 year period and (all standard intravenous fluids \$4.00 each X 500 patients X one level II STEMI center = \$2,000) + (all standard administration devices \$4.00 each X 500 patients X one level II STEMI center = \$2,000) + (all standard intravenous catheters \$4.00 each X 500 patients X one level II STEMI center = \$2,000) for a total of \$6,000 annually thereafter.
- i) External pacemaker - \$10 per set for pacer electrodes average cost (this will be used with the cardiac defibrillator already accounted for in d above) X 30 = \$300 X one level II STEMI center X 3 years = \$900 for the first 3 year period and \$10 per set X 30 = \$300 X one level II STEMI center X 1 year = \$300 annually thereafter.
- j) Transvenous pacemaker - \$200 average cost of pacer wires and equipment X 30 = \$6,000 X one level II STEMI center X 3 years = \$18,000 + generator cost \$7,000 X 5 generators = \$35,000 for the first year + \$1,000 X 2 years (years 2 through 3) for maintenance

and upkeep of generators for a total of \$37,000 for the generators and a total of \$55,000 for the first 3 year period and  
 $\$200 \text{ average cost} \times 30 = \$6,000 + \$1,000$  for the maintenance and upkeep of the generator = \$7,000 X one level II STEMI center X 1 year = \$7,000 annually thereafter.

- k) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries)  $\$50 \times 500 \text{ patients} = \$25,000$  X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II STEMI center for the intensive care unit for the first 3 year period -  
 $\$86,800$  (letter a above) +  $\$76,615$  (letter b above) +  $\$4,600$  (letter c above) +  $\$1,240,895$  (letter d above) +  $\$15,000$  (letter e above) +  $\$6,900$  (letter f above) +  $\$1,500$  (letter g above) +  $\$18,000$  (letter h above) +  $\$900$  (letter i above) +  $\$55,000$  (letter j above) +  $\$75,000$  (letter k above) =  $\$1,581,210$  for the first 3 year period.

Total cost for resuscitation equipment for one level II STEMI center for the intensive care unit for annually thereafter -  $\$27,100$  (letter a above) +  $\$25,425$  (letter b above) +  $\$1,000$  (letter c above) +  $\$401,500$  (letter d above) +  $\$5,000$  (letter e above) +  $\$1,500$  (letter f above) +  $\$250$  (letter g above) +  $\$6,000$  (letter h above) +  $\$300$  (letter i above) +  $\$7,000$  (letter j above) +  $\$25,000$  (letter k above) =  $\$500,075$  for annually thereafter.

**4) Cardiac Catheterization lab diagnostic and interventional equipment-**

- a) Sheaths -  $\$2,000 \text{ average cost} \times 500 = \$1,000,000$  X one level II STEMI center X 3 years =  $\$3,000,000$  for the first 3 year period and  $\$2,000 \times 500 = \$1,000,000$  X one level II STEMI center X 1 year =  $\$1,000,000$  annually thereafter.
- b) Diagnostic wires -  $\$200 \text{ average cost} \times 250 = \$50,000$  X one level II STEMI center X 3 years =  $\$150,000$  for the first 3 year period and  $\$200 \times 250 = \$50,000$  X one level II STEMI center X 1 year =  $\$50,000$  annually thereafter.
- c) Diagnostic catheters -  $\$200 \text{ average cost} \times 250 = \$50,000$  X one level II STEMI center X 3 years =  $\$150,000$  for the first 3 year period and  $\$200 \times 250 = \$50,000$  X one level II STEMI center X 1 year =  $\$50,000$  annually thereafter.
- d) Manifold or contrast injector/delivery system -  $\$200 \text{ average cost} \times 250 = \$50,000$  X one level II STEMI center X 3 years =  $\$150,000$  for the first 3 year period and  $\$200 \times 250 = \$50,000$  X one level II STEMI center X 1 year =  $\$50,000$  annually thereafter.
- e) Pressure tubing -  $\$125.00 \text{ average cost for 96 inches of pressure tubing} \times 250 = \$31,250$  X one level II STEMI center X 3 years =  $\$93,750$  for the first 3 year period and  $\$125.00 \text{ average cost for 96}$

- inches X 250 = \$31,250 X one level II STEMI center X 1 year = \$31,250 annually thereafter.
- f) Interventional guide wires - \$350 X 250 = \$87,500 X one level II STEMI center X 3 years = \$262,500 for the first 3 year period and \$350 X 250 = \$87,500 X one level II STEMI center X 1 year = \$87,500 annually thereafter.
  - g) Interventional guide catheters - \$26 X 250 = \$6,500 X one level II STEMI center X 3 years = \$19,500 for the first 3 year period and \$26 X 250 = \$6,500 X one level II STEMI center X 1 year = \$6,500 annually thereafter.
  - h) Balloon catheters (compliant and non-compliant) - \$500 X 250 = \$125,000 X one level II STEMI center X 3 years = \$375,000 for the first 3 year period and \$500 X 250 = \$125,000 X one level II STEMI center X 1 year = \$125,000 annually thereafter.
  - i) Stents (bare metal stents and drug eluting stents) - (bare metal stent \$1,000 X 100 = \$100,000) + (drug eluting stents \$2,500 X 150 = \$375,000) for a total of \$475,000 X one level II STEMI center X 3 years = \$1,425,000 for the first 3 year period and (bare metal stent \$1,000 X 100 = \$100,000) + (drug eluting stents \$2,500 X 150 = \$375,000) for a total of \$475,000 X one level II STEMI center X 1 year = \$475,000 annually thereafter.
  - j) Balloon pump catheters - \$500 X 250 = \$125,000 X one level II STEMI center X 3 years = \$375,000 for the first 3 year period and \$500 X 250 = \$125,000 X one level II STEMI center X 1 year = \$125,000 annually thereafter.
  - k) Thrombectomy aspiration catheters/mechanical thrombectomy device - \$600 X 250 = \$150,000 X one level II STEMI center X 3 years = \$450,000 for the first 3 year period and \$600 X 250 = \$150,000 X one level II STEMI center X 1 year = \$150,000 annually thereafter.
  - l) Balloon pump - (\$73,000 X 1 machine X one level II STEMI center X 1 year = \$73,000 for the first year) + (\$3,000 for upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$6,000) = for a total of \$79,000 for the first 3 year period and \$3000 for upkeep and maintenance X one level II STEMI center X 1 year = \$3,000 annually thereafter.
  - m) Embolic protection device - \$4,000 X 50 = \$200,000 X one level II STEMI center X 3 years = \$600,000 for the first 3 year period and \$200,000 X one level II STEMI center X 1 year = \$200,000 annually thereafter.

**Total cost for cardiac catheterization lab diagnostic and interventional equipment for one level II STEMI center for the first 3 year period - \$3,000,000 (letter a above) + \$150,000 (letter b above) + \$150,000 (letter c above) + \$150,000 (letter d above) + \$93,750 (letter e above) + \$262,500 (letter f above) + \$19,500 (letter g above) + \$375,000 (letter h above) + \$1,425,000 (letter i above) + \$375,000 (letter j above) + \$450,000 (letter k above) + \$79,000 (letter l above) + \$600,000 (letter m above) = \$7,129,750 for the first 3 year period.**

Total cost for cardiac catheterization lab diagnostic and interventional equipment for one level II STEMI center for annually thereafter - \$1,000,000 (letter a above) + \$50,000 (letter b above) + \$50,000 (letter c above) + \$50,000 (letter d above) + \$31,250 (letter e above) + \$87,500 (letter f above) + \$6,500 (letter g above) + \$125,000 (letter h above) + \$475,000 (letter i above) + \$125,000 (letter j above) + \$150,000 (letter k above) + \$3,000 (letter l above) + \$200,000 (letter m above) = \$2,353,250 for annually thereafter.

- 5) Cardiac catheterization lab resuscitation equipment -
- a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes - (laryngoscopes at least 2 X \$300 each = \$600 X one level II STEMI center X 3 years = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period) + (mechanical ventilator \$7,000 X one level II STEMI center X 1 year (the first year) = \$7,000 + \$1,500 for annual upkeep and maintenance of ventilator X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$10,000) for a total of \$49,300 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level II STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 1 year = \$12,500) + (mechanical ventilator \$1,500 annual upkeep and maintenance X one level II STEMI center X 1 year = \$1,500) for a total of \$14,600 annually thereafter.
- b) Bag-mask resuscitator and sources of oxygen - (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period) + (air outlet \$70 X 7 = \$490 X one level II STEMI center X 1 year (the first year) = \$490 + \$150 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level II STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first three year period) for a total of \$114,115 for the first 3 year period and (bag mask resuscitator \$250 for a pack of 10 X 50

packs = \$12,500 X one level II STEMI center X 1 year = \$12,500) + (air outlet \$150 for annual upkeep and maintenance X one level II STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level II STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) for a total of \$37,925 annually thereafter.

- c) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X one level II STEMI center X 3 years = \$1,200,000 for the first 3 year period) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X one level II STEMI center X 1 year (the first year) = \$37,895 + \$1,500 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period) for a total of \$1,240,895 for the first 3 year period and (telemetry \$800 X 500 patients = \$400,000 X one level II STEMI center X 1 year = \$400,000) + (\$1,500 for annual upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level II STEMI center X 1 year = \$1,500) for a total of \$401,500 annually thereafter.
- e) All standard intravenous fluids and administration devices and intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) for a total of \$18,000 for the first 3 year period (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- f) Drugs and supplies necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 100 patients = \$10,000 X one level II STEMI center X 3 years =



\$30,000 for the first 3 year period and \$10,000 X one level II STEMI center X 1 year = \$10,000 annually thereafter.

- g) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II STEMI center for the cardiac catheterization lab for the first 3 year period - \$49,300 (letter a above) + \$114,115 (letter b above) + \$75,000 (letter c above) + \$1,240,895 (letter d above) + \$18,000 (letter e above) + \$30,000 (letter f above) + \$75,000 (letter g above) = \$1,602,310 for the first 3 year period.

Total cost for resuscitation equipment for one level II STEMI center for the cardiac catheterization lab for annually thereafter - \$14,600 (letter a above) + \$37,925 (letter b above) + \$25,000 (letter c above) + \$401,500 (letter d above) + \$6,000 (letter e above) + \$10,000 (letter f above) + \$25,000 (letter g above) = \$520,025 for annually thereafter.

- 6) Resuscitation equipment for the intermediate care unit –
- a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes - (laryngoscopes at least 2 X \$300 each = \$600 X one level II STEMI center X 3 years = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period) + (mechanical ventilator \$7,000 X one level II STEMI center X 1 year (the first year) = \$7,000 + \$1,500 for annual upkeep and maintenance of ventilator X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$10,000) for a total of \$49,300 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level II STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 1 year = \$12,500) + (mechanical ventilator \$1,500 annual upkeep and maintenance X one level II STEMI center X 1 year = \$1,500) for a total of \$14,600 annually thereafter.
- b) Bag-mask resuscitator and sources of oxygen - (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period) + (air outlet \$70 X 7 = \$490 X one level II STEMI center X 1 year (the first year) = \$490 + \$150 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level II STEMI center X 3 years = \$2,625 for the first 3 year



- period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$114,115 for the first 3 year period and (bag mask resuscitator \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 1 year = \$12,500) + (air outlet \$150 for annual upkeep and maintenance X one level II STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level II STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) for a total of \$37,925 annually thereafter.
- c) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry \$800 X 500 patients = \$400,000 X one level II STEMI center X 3 years = \$1,200,000 for the first 3 year period) + (electrocardiograph, cardiac monitor and defibrillator = \$37,895 X one level II STEMI center X 1 year (the first year) = \$37,895 + \$1,500 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period) for a total of \$1,240,895 for the first 3 year period and (telemetry \$800 X 500 patients = \$400,000 X one level II STEMI center X 1 year = \$400,000) + (\$1,500 for annual upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator X one level II STEMI center X 1 year = \$1,500) for a total of \$401,500 annually thereafter.
- e) All standard intravenous fluids and administration devices and intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for

- standard administration devices X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) for a total of \$18,000 for the first 3 year period (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
- f) Drugs and supplies necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 100 patients = \$10,000 X one level II STEMI center X 3 years = \$30,000 for the first 3 year period and \$10,000 X one level II STEMI center X 1 year = \$10,000 annually thereafter.
- g) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$50 X 500 patients = \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II STEMI center for the intermediate care unit for the first 3 year period - \$49,300 (letter a above) + \$114,115 (letter b above) + \$75,000 (letter c above) + \$1,240,895 (letter d above) + \$18,000 (letter e above) + \$30,000 (letter f above) + \$75,000 (letter g above) = \$1,602,310 for the first 3 year period.

Total cost for resuscitation equipment for one level II STEMI center for the intermediate care unit for annually thereafter - \$14,600 (letter a above) + \$37,925 (letter b above) + \$25,000 (letter c above) + \$401,500 (letter d above) + \$6,000 (letter e above) + \$10,000 (letter f above) + \$25,000 (letter g above) = \$520,025 for annually thereafter.

- 7) Resuscitation equipment for the radiology department -
- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level II STEMI center X 3 years = \$1,800 for the first 3 year period and at least 2 X \$300 each = \$600 X one level II STEMI center X 1 year = \$600 annually thereafter.
- b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period and \$250 for a pack of 10 X 50 X one level II STEMI center X 1 year = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs =

- \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period and \$250 for a pack of 10 X 50 packs X one level II STEMI center = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level II STEMI center X 1 year (the first year) = \$490 for the first year + \$150 annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level II STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$76,615 for the first 3 year period and (air outlet \$70 X 7 = \$490 X one level II STEMI center X 1 year = \$490) + (regulator for air outlet \$35 X 25 = \$875 X one level II STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) for a total of \$25,765 for annually thereafter.
- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$50 X 500 X one level II STEMI center X 1 year = \$25,000 annually thereafter.
- f) Telemetry- average of \$800 X 500 patients = \$400,000 X one level II STEMI center X 3 years = \$1,200,000 for the first 3 year period and \$800 X 500 patients X one level II STEMI center X 1 year = \$400,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level II STEMI center = \$37,895 X 1 year (first year) = \$37,895 for the first year + \$1,500 for the annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for the annual upkeep and maintenance X one level II STEMI center X 1 year = \$1,500 for annually thereafter.
- h) All standard administration devices - \$4.00 each X 500 patients =

$\$2,000 \times \text{one level II STEMI center} \times 3 \text{ years} = \$6,000$  for the first 3 year period and  $\$2,000 \times \text{one level II STEMI center} \times 1 \text{ year} = \$2,000$  annually thereafter.

i) All standard intravenous catheters -  $\$4.00$  each  $\times 500$  patients =  $\$2,000 \times \text{one level II STEMI center} \times 3 \text{ years} = \$6,000$  for the first 3 year period and  $\$2,000 \times \text{one level II STEMI center} \times 1 \text{ year} = \$2,000$  annually thereafter.

j) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate  $\$100 \times 500$  patients =  $\$50,000 \times \text{one level II STEMI center} \times 3 \text{ years} = \$150,000$  for the first 3 year period and  $\$50,000 \times \text{one level II STEMI center} \times 1 \text{ year} = \$50,000$  annually thereafter.

k) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries)  $\$50 \times 500$  patients =  $\$25,000 \times \text{one level II STEMI center} \times 3 \text{ years} = \$75,000$  for the first 3 year period and  $\$25,000 \times \text{one level II STEMI center} \times 1 \text{ year} = \$25,000$  annually thereafter.

Total cost for resuscitation equipment for one level II STEMI center for the radiology department for the first 3 year period -  $\$1,800$  (letter a above) +  $\$37,500$  (letter b above) +  $\$37,500$  (letter c above) +  $\$76,615$  (letter d above) +  $\$75,000$  (letter e above) +  $\$1,200,000$  (letter f above) +  $\$40,895$  (letter g above) +  $\$6,000$  (letter h above) +  $\$6,000$  (letter i above) +  $\$150,000$  (letter j above) +  $\$75,000$  (letter k above) =  $\$1,706,310$  for the first 3 year period.

Total cost for resuscitation equipment for one level II STEMI center for the radiology department for annually thereafter -  $\$600$  (letter a above) +  $\$12,500$  (letter b above) +  $\$12,500$  (letter c above) +  $\$25,765$  (letter d above) +  $\$25,000$  (letter e above) +  $\$400,000$  (letter f above) +  $\$1,500$  (letter g above) +  $\$2,000$  (letter h above) +  $\$2,000$  (letter i above) +  $\$50,000$  (letter j above) +  $\$25,000$  (letter k above) =  $\$556,865$  for annually thereafter.

8) Monitoring equipment to fully support the STEMI patient during the time the patient is physically present in the radiology department and during transportation to and from the radiology department -  $(\$1,800 \text{ each} \times 8 \text{ machines} = \$14,400 \times \text{one level II STEMI center} \times 1 \text{ year (the first year)} = \$14,400) + (\$150 \text{ for upkeep and maintenance} \times 8 \text{ machines} \times 2 \text{ years (years 2 through 3)} \times \text{one level II STEMI center} = \$2,400)$  for a total of  $\$16,800$  for the first 3 year period and  $\$150 \times 8 \text{ machines} \times 1 \text{ year} \times \text{one level II STEMI center} = \$1,200$  annually thereafter.

9) X-ray capability -  $(\$150,000 \times 1 \text{ machine} = \$150,000 \times \text{one level II STEMI center} \times 1 \text{ year (the first year)} = \$150,000) + (\$500 \text{ for upkeep and maintenance} \times 1 \text{ machine} \times 2 \text{ years (years 2 through 3)} \times \text{one level II STEMI center} = \$1,000)$  for a total of  $\$151,000$  for the first 3 year period and  $\$500 \text{ for upkeep and maintenance} \times 1 \text{ machine} \times 1 \text{ year} \times \text{one level II STEMI center} = \$500$  annually thereafter.

10) In-house computerized tomography - \$1,000,000 average for CT machine = \$1,000,000 X one level II STEMI center X 1 year (the first year) = \$1,000,000 for the first year + \$200,000 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$400,000 for a total of \$1,400,000 for the first 3 year period and \$200,000 for annual upkeep and maintenance X one level II STEMI centers X 1 year = \$200,000 annually thereafter.

11) Operating rooms shall have at least the following equipment:

- a) Thermal control equipment for patient and resuscitation fluids - (temperature control devices \$2,750 each X 2 devices = \$5,500 X one level II STEMI center X 1 year (the first year) = \$5,500 + \$2,750 X 1 device = \$2,750 for replacement X 2 years (years 2 through 3) X one level II STEMI center = \$5,500 for a total of \$11,000 for the first 3 year period ) + (blankets \$270 pack of 10 X 50 = \$13,500 X one level II STEMI center X 3 years = \$40,500 for the first 3 year period) + (resuscitation fluids \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period) for a total of \$126,500 for the first 3 year period and (temperature control devices \$2,750 each X 1 device X 1 year = \$2,750 for replacement X one level II STEMI center = \$2,750) + (blankets \$270 pack of 10 X 50 = \$13,500 X one level II STEMI center X 1 year = \$13,500) + (resuscitation fluids \$50 X 500 patients = \$25,000 X one level II STEMI center = \$25,000) for a total of \$41,250 for annually thereafter.
- b) X-ray capability - (\$150,000 X 1 machine = \$150,000 X one level II STEMI center X 1 year (the first year) = \$150,000) + (\$500 for upkeep and maintenance X 1 machine X 2 years (years 2 through 3) X one level II STEMI center = \$1,000) for a total of \$151,000 for the first 3 year period and \$500 for upkeep and maintenance X 1 machine X 1 year X one level II STEMI center = \$500 annually thereafter.
- c) Instruments and equipment necessary for cardiothoracic surgery capability - estimate of \$3,000 X one level II STEMI center X 3 years = \$9,000 for the first 3 year period and \$3,000 X one level II STEMI center X 1 year = \$3,000 annually thereafter.
- d) Patient Monitoring equipment - \$10,000 X 5 machines X one level II STEMI center X 1 year (the first year) = \$50,000 for the first year + \$500 for annual upkeep and maintenance X 5 machines X one level II STEMI center X 2 years (years 2 through 3) = \$5,000 for a total of \$55,000 for the first 3 year period and \$500 for annual upkeep and maintenance X 5 machines X one level II STEMI center X 1 year = \$2,500 annually thereafter.

Total cost for operating room equipment for one level II STEMI center for the first 3 year period - \$126,500 (letter a above) + \$151,000

(letter b above) + \$9,000 (letter c above) + \$55,000 (letter d above) = \$341,500 for the first 3 year period.

Total cost for operating room equipment for one level II STEMI center for annually thereafter - \$41,250 (letter a above) + \$500 (letter b above) + \$3,000 (letter c above) + \$2,500 (letter d above) = \$47,250 for annually thereafter.

**12) Resuscitation equipment available to the operating room**

- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level II STEMI center X 3 years = \$1,800 for the first 3 year period and \$600 X one level II STEMI center X 1 year = \$600 annually thereafter.
- b) Endotracheal tubes of all sizes - 250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period and \$12,500 X one level II STEMI center X 1 year = \$12,500 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 50 packs = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period and \$12,500 X one level II STEMI center X 1 year = \$12,500 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level II STEMI center X 1 year (the first year) = \$490 for the first year + air outlet annual upkeep and maintenance \$150 X one level II STEMI center X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level II STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$76,615 for the first 3 year period and (air outlet annual upkeep and maintenance \$150 X one level II STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level II STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 = \$1,050 X one level II STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level

- II STEMI center X 1 year = \$200) for a total of \$25,425 annually thereafter.
- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.
  - f) Telemetry- average of \$800 X 500 patients = \$400,000 X one level II STEMI center X 3 years = \$1,200,000 for the first 3 year period and \$400,000 X one level II STEMI center X 1 year = \$400,000 annually thereafter.
  - g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level II STEMI center X 1 year (the first year) = \$37,895 + \$1,500 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for the annual upkeep and maintenance X one level II STEMI center X 1 year = \$1,500 annually thereafter.
  - h) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) for a total of \$18,000 for the first 3 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.
  - i) Drugs necessary for emergency care- e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level II STEMI center X 3 years = \$150,000 for the first 3 year period and \$100 X 500 patients X one level I STEMI center X 1 year = \$50,000 annually thereafter.
  - j) Supplies necessary for emergency care (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) - \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$50 X 500 patients = \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.

**Total cost for resuscitation equipment for one level II STEMI center for the operating room for the first 3 year period - \$1,800 (letter a above) + \$37,500 (letter b above) + \$37,500 (letter c above) + \$76,615**



(letter d above) + \$75,000 (letter e above) + \$1,200,000 (letter f above) + \$40,895 (letter g above) + \$18,000 (letter h above) + \$150,000 (letter i above) + \$75,000 (letter j above) = \$1,712,310 for the first 3 year period.

Total cost for resuscitation equipment for one level II STEMI center for the operating room for annually thereafter - \$600 (letter a above) + \$12,500 (letter b above) + \$12,500 (letter c above) + \$25,425 (letter d above) + \$25,000 (letter e above) + \$400,000 (letter f above) + \$1,500 (letter g above) + \$6,000 (letter h above) + \$50,000 (letter i above) + \$25,000 (letter j above) = \$558,525 for annually thereafter.

**13) Resuscitation equipment for the Post-Anesthesia Recovery room (PAR) -**

a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes, bag-mask resuscitator, sources of oxygen and a mechanical ventilator - (laryngoscopes at least 2 X \$300 each = \$600 X one level II STEMI center X 3 years = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period) + (bag-mask resuscitator \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 3 years = \$37,500 for the first 3 year period) + (mechanical ventilator \$7,000 X one level II STEMI center X 1 year (the first year) = \$7,000 + \$1,500 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$10,000 for the first 3 year period) + (air outlet \$70 X 7 = \$490 X one level II STEMI center X 1 year (the first year) = \$490 + \$150 for annual upkeep and maintenance X 2 years (years 2 through 3) X one level II STEMI center = \$300 for a total of \$790 for the first 3 year period) + (regulator \$35 X 25 = \$875 X one level II STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 3 years = \$3,600 for the first 3 year period) + (ambu bags \$10.50 X 100 patients = \$1,050 X one level II STEMI center X 3 years = \$3,150 for the first 3 year period) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 3 years = \$63,000 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 3 years = \$600 for the first 3 year period) for a total of \$163,415 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level II STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 50 = \$12,500 X one level II STEMI center X 1 year = \$12,500) + (bag-mask resuscitator \$250 for a pack of 10 X 50 = \$12,500 X one level



II STEMI center X 1 year = \$12,500) + (mechanical ventilator \$1,500 for annual upkeep and maintenance X one level II STEMI center X 1 year = \$1,500) + (air outlet \$150 for annual upkeep and maintenance X one level II STEMI center X 1 year = \$150) + (regulator \$35 X 25 = \$875 X one level II STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) + (masks \$2.40 X 500 patients = \$1,200 X one level II STEMI center X 1 year = \$1,200) + (ambu bags \$10.50 X 100 patients = \$1,050 X one level II STEMI center X 1 year = \$1,050) + (oxygen tank \$70 X 300 = \$21,000 X one level II STEMI center X 1 year = \$21,000) + (regulator for oxygen tank \$30 X 25 = \$750 X one level II STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 500 patients = \$200 X one level II STEMI center X 1 year = \$200) for a total of \$52,525 annually thereafter.

- b) Suction devices - suction devices canisters and tubing for wall suction \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$50 X 500 patients X one level II STEMI center X 1 year = \$25,000 annually thereafter.
- c) Telemetry, electrocardiograph capability, cardiac monitor and defibrillator - (telemetry average \$800 X 500 patients = \$400,000 X one level II STEMI center X 3 years = \$1,200,000 for the first 3 year period) + (electrocardiograph, cardiac monitor and defibrillator \$37,895 X one level II STEMI center X 1 year (the first year) = \$37,895 for the first year + \$1,500 for annual upkeep and maintenance X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for electrocardiograph, cardiac monitor and defibrillator) for a total of \$1,240,895 for the first 3 year period and \$1,500 for annual upkeep and maintenance X one level II STEMI center X 1 year = \$1,500 + telemetry average \$800 X 500 patients = \$400,000 X one level II STEMI center X 1 year = \$400,000 for a total of \$401,500 annually thereafter.
- d) All standard intravenous fluids and administration devices, including intravenous catheters - (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard administration devices X 500 patients X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II STEMI center X 3 years = \$6,000 for the first 3 year period) for a total of \$18,000 for the first 3 year period and (\$4.00 each for standard intravenous fluids X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) + (\$4.00 each for standard administration devices X 500 patients X one level II STEMI center X 1 year = \$2,000 for the first 3 year period) + (\$4.00 each for standard intravenous catheters X 500 patients = \$2,000 X one level II STEMI center X 1 year = \$2,000) for a total of \$6,000 annually thereafter.

- e) Drugs and supplies necessary for emergency care - saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 500 patients = \$50,000 X one level II STEMI center X 3 years = \$150,000 for the first 3 year period and \$50,000 X one level II STEMI center X 1 year = \$50,000 annually thereafter.
- f) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 500 patients = \$25,000 X one level II STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level II STEMI center X 1 year = \$25,000 annually thereafter.

Total cost for resuscitation equipment for one level II STEMI center for the post-anesthesia recovery room (PAR) for the first 3 year period - \$163,415 (letter a above) + \$75,000 (letter b above) + \$1,240,895 (letter c above) + \$18,000 (letter d above) + \$150,000 (letter e above) + \$75,000 (letter f above) = \$1,722,310 for the first 3 year period.

Total cost for resuscitation equipment for one level II STEMI center for the post-anesthesia recovery room (PAR) for annually thereafter - \$52,525 (letter a above) + \$25,000 (letter b above) + \$401,500 (letter c above) + \$6,000 (letter d above) + \$50,000 (letter e above) + \$25,000 (letter f above) = \$560,025 for annually thereafter.

**14) Laboratory Services -**

- a) Standard analyses of blood, urine and other body fluids - costs of materials \$200 X 500 patients = \$100,000 X one level II STEMI center X 3 years = \$300,000 for the first 3 year period and \$200 X 500 patients X one level II STEMI center X 1 year = \$100,000 annually thereafter.
- b) Blood typing and cross matching - centrifuge \$2,000 X one level II STEMI center X 1 year (the first year) = \$2,000 + \$250 for the annual upkeep and maintenance of the centrifuge X one level II STEMI center X 2 years (years 2 through 3) = \$500 for a total of \$2,500 for the first 3 year period and \$250 for the annual upkeep and maintenance of the centrifuge X one level II STEMI center X 1 year = \$250 annually thereafter.
- c) Coagulation studies - \$200 materials X 250 patients = \$50,000 X one level II STEMI center X 3 years = \$150,000 for the first 3 year period and \$200 materials X 250 patients = \$50,000 X one level II STEMI center X 1 year = \$50,000 annually thereafter.
- d) Blood bank or access to a community central blood bank and adequate hospital blood storage facilities - at the least blood storage refrigerators 1 large refrigerator / use of community central blood bank at \$15,000 X one level II STEMI center X 1 year (the first year) = \$15,000 + \$1,500 for the annual upkeep and maintenance of the blood storage refrigerator X one level II STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$18,000 for the first 3 year period and \$1,500 for the

annual upkeep and maintenance of the blood storage refrigerator  
X one level II STEMI center X 1 year = \$1,500 annually  
thereafter.

e) Blood gases and pH determinations - at least 1 blood gas analyzer  
and kit \$3,000 X one level II STEMI center X 3 years =  
\$9,000 for the first 3 year period and \$3,000 X one level II  
STEMI center X 1 year = \$3,000 annually thereafter.

f) Blood chemistries- test and kits average of \$350 X 100 patients=  
\$35,000 X one level II STEMI center X 3 years = \$105,000 for  
the first 3 year period and \$350 X 100 patients X one level II  
STEMI center X 1 year = \$35,000 annually thereafter.

Total cost for laboratory services for one level II STEMI center for  
the first 3 year period - \$300,000 (letter a above) + \$ 2,500 (letter b  
above) + \$150,000 (letter c above) + \$18,000 (letter d above) + \$9,000  
(letter e above) + \$105,000 (letter f above) = \$584,500 for the first 3  
year period.

Total cost for laboratory services for one level II STEMI center for  
annually thereafter - \$100,000 (letter a above) + \$250 (letter b above)  
+ \$50,000 (letter c above) + \$1,500 (letter d above) + \$3,000 (letter e  
above) + \$35,000 (letter f above) = \$189,750 for annually thereafter.

15) Angiography with interventional capability for cardiac  
catheterization lab – average of \$1,000,000 X one level II STEMI  
center X 1 year (the first year) = \$1,000,000 for the first year +  
\$200,000 for annual upkeep and maintenance X one level II STEMI  
center X 2 years (years 2 through 3) = \$400,000 for a total of  
\$1,400,000 for the first 3 year period and \$200,000 for annual upkeep  
and maintenance X one level II STEMI center X 1 year = \$200,000  
annually thereafter.

Total cost for medical equipment for one level II STEMI center for the first  
3 year period - \$3,600 (number 1 above) + \$1,170,885 (number 2 above) +  
\$1,581,210 (number 3 above) + \$7,129,750 (number 4 above) + \$1,602,310  
(number 5 above) + \$1,602,310 (number 6 above) + \$1,706,310 (number 7  
above) + \$16,800 (number 8 above) + \$151,000 (number 9 above) +  
\$1,400,000 (number 10 above) + \$341,500 (number 11 above) + \$1,712,310  
(number 12 above) + \$1,722,310 (number 13 above) + \$584,500 (number  
14 above) + \$1,400,000 (number 15 above) = \$22,124,795 for the first 3  
year period.

Total cost for medical equipment for one level II STEMI center for annually  
thereafter - \$1,200 (number 1 above) + \$364,275 (number 2 above) +  
\$500,075 (number 3 above) + \$2,353,250 (number 4 above) + \$520,025  
(number 5 above) + \$520,025 (number 6 above) + \$556,865 (number 7  
above) + \$1,200 (number 8 above) + \$500 (number 9 above) + \$200,000  
(number 10 above) + \$47,250 (number 11 above) + \$558,525 (number 12  
above) + \$560,025 (number 13 above) + \$189,750 (number 14 above) +

\$200,000 (number 15 above) = \$6,572,965 for annually thereafter.

**D. The STEMI center shall have support services to assist the patient's family from time of entry into the facility to time of discharge - at least 1 full time equivalent medical social worker \$66,000 annually X one level II STEMI center X 3 years= \$198,000 for the first 3 year period and \$66,000 X one level II STEMI center X 1 year = \$66,000 annually thereafter.**

**E. The STEMI center shall have a cardiac rehabilitation program or a written network agreement for the provision of cardiac rehabilitation - at least 2 registered nurses X \$67,623 annually X one level II STEMI center X 3 years = \$405,738 for the first 3 year period and \$67,623 X 2 registered nurses X one level I STEMI center X 1 year = \$135,246 annually thereafter.**

**F. Courses/conferences for program manager - attend one national regional or state meeting every 3 years focused on cardiovascular disease.**

- 1) National or international STEMI course or conference - (\$1200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level II STEMI centers X 3 years = \$0 for the first 3 year period and \$2,950 X no level II STEMI centers X 1 year = \$0 annually thereafter.**
- 2) Regional STEMI course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level II STEMI center X 1 time during a 3 year period = \$1,750 for the first 3 year period and \$1,750 X one level II STEMI center X 1 year = \$1,750 annually thereafter.**
- 3) State STEMI course or conference - (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level II STEMI centers X 3 years = \$0 for the first 3 year period and \$1,150 X no level II STEMI centers X 1 year = \$0 annually thereafter.**

**G. STEMI registry**

- 1) Computer with internet capability/access \$600 computer + internet fee \$100/month \$1,200 annually X one level II STEMI center X 3 years = \$5,400 for the first 3 year period and \$1,800 X one level II STEMI center X 1 year = \$1,800 annually thereafter.**
- 2) Patient registrar - \$36,258 annually X one level II STEMI center X 3 years = \$108,774 for the first 3 year period and \$36,258 X one level II STEMI center X 1 year = \$36,258 annually thereafter.**
- 3) Training to set up STEMI registry system/program for data entry- \$200 annually X one level II STEMI center X 3 years = \$600 for the first 3 year period and \$200 X one level II STEMI center X 1 year = \$200 annually thereafter.**

**H. Public education program to promote STEMI prevention and STEMI symptoms awareness - e.g. community health fairs costs of printing and**

advertisement costs (posters, brochures etc...) \$350 for each health fair x 12 health fairs annually = \$4,200 annually X one level II STEMI center X 3 years = \$12,600 for the first 3 year period and \$4,200 X one level II STEMI center X 1 year = \$4,200 annually thereafter.

- I. Patient education program to promote STEMI prevention and STEMI symptoms awareness - printing costs of brochures etc... \$500 annually X one level II STEMI center X 3 years = \$1,500 for the first 3 year period and \$500 X one level II STEMI center X 1 year = \$500 annually thereafter.
- J. Professional education outreach program to provide training on caring for STEMI patients - e.g. hospitals sponsor at least 1 conference per year within their service area at the cost of \$2,000 annually X one level II STEMI center X 3 years = \$6,000 for the first 3 year period and \$2,000 X one level II STEMI center X 1 year = \$2,000 annually thereafter.
- K. STEMI centers shall be actively involved in local and regional EMS systems by providing training and clinical educational resources - hospitals sponsor at least 1 conference per year within their area for EMS at the cost of \$2,000 annually X one level II STEMI center X 3 years = \$6,000 for the first 3 year period and \$2,000 X one level II STEMI center X 1 year = \$2,000 annually thereafter.
- L. A lighted designated helicopter landing area at the STEMI center to accommodate incoming medical helicopters which shall be cordoned off at all times from the general public. The STEMI center shall also have a landing area on the hospital premises no more than three (3) minutes from the emergency room - (construction of helipad estimate of \$36,000 X 1 helipad X one level II STEMI center X 1 year (the first year) = \$36,000) + (maintenance and upkeep of helipad \$2,000 X 2 years (years 2 through 3) X one level II STEMI center = \$4,000) for a total of \$40,000 for the first 3 year period for the helipad + (cordoning barrier \$4,300 X 1 year (the first year) X one level II STEMI center = \$4,300) + \$500 for maintenance and upkeep of the cordoning barrier X 2 years (years 2 through 3) X one level II STEMI center = \$1,000) for a total of \$5,300 for the first 3 year period for the cordoning barrier for a total of \$45,300 for the first 3 year period and \$500 for maintenance and upkeep of the cordoning barrier X 1 year X one level II STEMI center = \$500 + \$500 for maintenance and upkeep of helipad X 1 year X one level II STEMI center = \$500 for a total of \$1,000 annually thereafter.

Total cost for one level II STEMI center for the first 3 year period - [\$28,402,965 letter A] + [\$4,739.43 letter B] + [\$22,124,795 letter C] + [\$198,000 letter D] + [\$405,738 letter E] + [\$1,750 letter F] + [\$114,774 letter G] + [\$12,600 letter H] + [\$1,500 letter I] + [\$6,000 letter J] + [\$6,000 letter K] + [\$45,300 letter L] = \$51,324,161 for the first 3 year period.

Total cost for one level II STEMI center for annually thereafter -  
[\$9,467,655 letter A] + [\$1,579.81 letter B] + [\$6,572,965 letter C] +  
[\$66,000 letter D] + [\$135,246 letter E] + [\$1,750 letter F] +  
[\$38,258 letter G] + [\$4,200 letter H] + [\$500 letter I] + [\$2,000  
letter J] + [\$2,000 letter K] + [\$1,000 letter L] = \$16,293,153 for  
annually thereafter.

It is expected that 4 level II STEMI centers will be designated during the first 3 year period (\$205,296,644) and those same level II STEMI centers will be designated again at some time (3 year intervals) annually thereafter (\$65,172,612).

**3. Level III STEMI centers.**

**A. Salary costs for medical professionals.**

- 1) A physician experienced in diagnosing and treating cardiovascular disease - \$204,430 annually X one level III STEMI center = \$204,430 X 3 years = \$613,290 for the first 3 year period and \$204,430 annually X one level III STEMI center X 1 year = \$204,430 annually thereafter.
- 2) At least 1 other health care professional or qualified individual credentialed in STEMI care - \$126,046 annually X one level III STEMI center = \$126,046 X 3 years = \$378,138 for the first 3 year period and \$126,046 annually X one level III STEMI center X 1 year = \$126,046 annually thereafter.
- 3) STEMI center medical director who is recommended to be a board certified or board admissible physician - \$204,430 annually X 3 years X one level III STEMI center = \$613,290 for the first 3 year period and \$204,430 annually X one level III STEMI center X 1 year = \$204,430 annually thereafter.
- 4) STEMI program manager/coordinator who is a registered nurse or a qualified individual - \$126,046 annually X one level III STEMI center = \$126,046 X 3 years = \$378,138 for the first 3 year period and \$126,046 annually X one level III STEMI center X 1 year = \$126,046 annually thereafter.
- 5) An internal medicine physician - \$181,823 annually X one level III STEMI center = \$181,823 X 3 years = \$545,469 for the first 3 year period and \$181,823 annually X one level III STEMI center X 1 year = \$181,823 annually thereafter.
- 6) A diagnostic radiologist - \$402,539 annually X one level III STEMI center = \$402,539 X 3 years = \$1,207,617 for the first 3 year period and \$402,539 annually X one level III STEMI center X 1 year = \$402,539 annually thereafter.
- 7) Emergency department physician credentialed for STEMI care by the STEMI center 24 hours a day, 7 days a week - \$244,973 annually X 3 emergency department physicians X one level III STEMI center = \$734,919 X 3 years = \$2,204,757 for the first 3 year period and \$244,973 annually X 3 physicians X one level III STEMI center X 1 year = \$734,919 annually thereafter.

- 8) Registered nurses in the emergency department - \$64,533 annually X 5 registered nurses in the emergency department = \$322,665 X one level III STEMI center = \$322,665 X 3 years = \$967,995 for the first 3 year period and \$322,665 X one level III STEMI center X 1 year = \$322,665 annually thereafter.
- 9) Medical director of the emergency department - \$199,038 annually X one level III STEMI center = \$199,038 X 3 years = \$597,114 for the first 3 year period and \$199,038 X one level III STEMI center X 1 year = \$199,038 annually thereafter.
- 10) Intermediate care unit medical director - \$177,560 annually X one level III STEMI center = \$177,560 X 3 years = \$532,680 for the first 3 year period and \$177,560 annually X one level III STEMI center X one year = \$177,560 annually thereafter.
- 11) Physician on duty or available 24 hours a day, 7 days a week in the intermediate care unit - \$177,560 annually X 3 physicians in the intermediate unit - \$532,680 X one level III STEMI center = \$532,680 X 3 years = \$1,598,040 for the first 3 year period and \$177,560 annually X 3 physicians = \$532,680 annually X one level III STEMI center X 1 year = \$532,680 annually thereafter.
- 12) The intermediate care unit shall have registered nurses and other essential personnel on duty 24 hours a day 7 days a week - \$65,097 annually for the registered nurse X 4 registered nurses in the intermediate care unit = \$260,388 X one level III STEMI center = \$260,388 X 3 years = \$781,164 for the first 3 year period and \$65,097 X 4 registered nurses = \$260,388 annually X one level III STEMI center X 1 year = \$260,388 annually thereafter.
- 13) Certified Nursing Technician - \$30,000 annually X one level III STEMI center = \$30,000 X 3 years = \$90,000 for the first 3 year period and \$30,000 annually X one level III STEMI center X 1 year = \$30,000 annually thereafter.
- 14) Radiologist - average \$300,000 annually X 3 neurologist/radiologists = \$900,000 X one level III STEMI center = \$900,000 X 3 years = \$2,700,000 for the first 3 year period and \$300,000 X 3 neurologists/radiologists = \$900,000 annually X one level III STEMI center X 1 year = \$900,000 annually thereafter.
- 15) Transport nurse - average \$62,000 annually X one level III STEMI center = \$62,000 X 4 transport nurses = \$248,000 X 3 years = \$744,000 for the first 3 year period and \$62,000 annually X 4 transport nurses X one level III STEMI center X 1 year = \$248,000 annually thereafter.
- 16) Radiology technician - average \$62,000 annually X 4 radiology technicians = \$248,000 X one level III STEMI center = \$248,000 X 3 years = \$744,000 for the first 3 year period and \$62,000 annually X 4 radiology technicians X one level III STEMI center X 1 year = \$248,000 annually thereafter.
- 17) Nurse educator/supervisor to ensure staff are trained on core competencies - \$78,500 annually X one level III STEMI center = \$78,500 X 3 years = \$235,500 for the first 3 year period and \$78,500 annually X one level III STEMI center X 1 year = \$78,500 annually thereafter.



**Total cost for salaries for medical professionals for one level III STEMI center for the first year 3 year period - \$613,290 (#1 above) + \$378,138 (#2 above) + \$613,290 (#3 above) + \$378,138 (#4 above) + \$545,469 (#5 above) + \$1,207,617 (#6 above) + \$2,204,757 (#7 above) + \$967,995 (#8 above) + \$597,114 (#9 above) + \$532,680 (#10 above) + \$1,598,040 (#11 above) + \$781,164 (#12 above) + \$90,000 (#13 above) + \$2,700,000 (#14 above) + \$744,000 (#15 above) + \$744,000 (#16 above) + \$235,500 (#17 above) = \$14,931,192 for the first 3 year period.**

**Total cost for salaries for medical professionals for one level III STEMI center for annually thereafter - \$204,430 (#1 above) + \$126,046 (#2 above) + \$204,430 (#3 above) + \$126,046 (#4 above) + \$181,823 (#5 above) + \$402,539 (#6 above) + \$734,919 (#7 above) + \$322,665 (#8 above) + \$199,038 (#9 above) + \$177,560 (#10 above) + \$532,680 (#11 above) + \$260,388 (#12 above) + \$30,000 (#13 above) + \$900,000 (#14 above) + \$248,000 (#15 above) + \$248,000 (#16 above) + \$78,500 (#17 above) = \$4,977,064 for annually thereafter.**

**B) Continuing education for STEMI center staff.**

- 1) Level III STEMI center call roster member (emergency department physician) shall complete a minimum average of 8 hours of continuing education in cardiovascular disease every 2 years - average of \$10.00 per hour for online training X 4 hours X 3 years X one level III STEMI center = \$120 for the first 3 year period and \$10 X 4 hours X one level III STEMI center X 1 year = \$40 annually thereafter.**
- 2) Level III STEMI center call roster member (others as appropriate) shall complete a minimum average of 8 hours of continuing education in cardiovascular disease every 2 years - average of \$10.00 per hour for online training X 4 hours X 3 years X one level III STEMI center = \$120 X 2 others as appropriate = \$240 for the first 3 year period and \$10 per hour for online training X 4 hours X one level III STEMI center X 1 year X 2 others as appropriate = \$80 annually thereafter.**
- 3) A level III STEMI center medical director shall complete a minimum of 8 hours of continuing medical education every 2 years in the area of cardiovascular disease- average of \$10.00 per hour for online training X 4 hours X 3 years X one level III STEMI center = \$120 for the first 3 year period and \$10 per hour for online training X 4 hours X one level III STEMI center X 1 year = \$40 annually thereafter.**
- 4) A level III program manager/coordinator shall complete a minimum of 8 hours of continuing education every 2 years in cardiovascular disease - average of \$39.99 annually for online training X 3 years X one level III STEMI center = \$119.97 for the first 3 year period and \$39.99 X one level III STEMI center X 1 year = \$39.99 annually thereafter.**



- 5) Emergency department physicians in level III STEMI centers shall complete a minimum average of 6 hours of continuing medical education in cardiovascular disease every 2 years - average of \$10.00 per hour for online training X 3 emergency department physicians X 3 hours of continuing medical education X 3 years X one level III STEMI center = \$270 for the first 3 year period and \$10.00 per hour for online training X 3 emergency department physicians X 3 hours of continuing medical education X one level III STEMI center X 1 year = \$90 annually thereafter.
- 6) Registered nurses assigned to the emergency departments in level III STEMI centers shall complete a minimum of 6 hours of continuing education in the area of cardiovascular disease every 2 years - average of \$39.99 annually for online training X 5 registered nurses in the emergency department X 3 years X one level III STEMI center = \$599.85 for the first 3 year period and \$39.99 annually for online training X 5 registered nurses in the emergency department X one level III STEMI center X 1 year = \$199.95.
- 7) Registered nurses for level III STEMI centers shall maintain core competencies in the care of the STEMI patient annually as determined by the STEMI center - average for nurse educator/supervisor \$78,500 annually X 3 years X one level III STEMI center = \$235,500 for the first 3 year period and \$78,500 X one level III STEMI center X 1 year = \$78,500 annually thereafter.
- 8) Registered nurses assigned to the intermediate care unit in level III STEMI centers shall complete a minimum of 8 hours of continuing education in the area of cardiovascular disease every 2 years - average of \$39.99 annually for online training X 5 registered nurses in the emergency department X 3 years X one level III STEMI center = \$599.85 for the first 3 year period and \$39.99 annually for online training X 5 registered nurses in the emergency department X one level III STEMI center X 1 year = \$199.95.

Total cost for continuing education for one level III STEMI center for the first 3 year period - \$120 (#1 above) + \$240 (#2 above) + \$120 (#3 above) + \$119.97 (#4 above) + \$270 (#5 above) + \$599.85 (#6 above) + \$235,500 (#7 above) + \$599.85 (#8 above) = \$237,569.67 for the first 3 year period.

Total cost for continuing education for one level III STEMI center for annually thereafter - \$40 (#1 above) + \$80 (#2 above) + \$40 (#3 above) + \$39.99 (#4 above) + \$90 (#5 above) + \$199.95 (#6 above) + \$78,500 (#7 above) + \$199.95 (#8 above) = \$79,189.89 for annually thereafter.

### C.) Medical Equipment.

- 1) Electronic communication devices for STEMI call roster members - 2 electronic communication devices (cell phone and beeper/pager) X \$300 for the annual cost of each electronic communication device X 2 STEMI call roster members carrying this device (1 member on call

and 1 back-up member) X 3 years X one level III STEMI center = \$3,600 for the first 3 year period and 2 electronic communications devices at \$300 each (cell phone and beeper/pager) X 2 STEMI call roster members carrying this device (1 member on call and 1 back-up member) X one level III STEMI center X 1 year = \$1,200 annually thereafter.

- 2) Resuscitation equipment for the emergency department -
- a) Laryngoscopes - at least 2 X \$300 each = \$600 X one level III STEMI center = \$600 X 3 years = \$1,800 for the first 3 year period and at least 2 X \$300 each = \$600 X one level III STEMI center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 25 packs = \$6,250 X one level III STEMI center X 3 years = \$18,750 for the first 3 year period and \$250 for a pack of 10 X 25 packs = \$6,250 X one level III STEMI center X 1 year = \$6,250 annually thereafter.
  - c) Bag-mask resuscitator - \$250 for a pack of 10 X 25 packs = \$6,250 X one level III STEMI center X 3 years = \$18,750 for the first 3 year period and \$250 for a pack of 10 X 25 packs = \$6,250 X one level III STEMI center X 1 year = \$6,250 annually thereafter.
  - d) Sources of oxygen - (air outlet \$70 X 7 = \$490 for the first year X one level III STEMI center = \$490 + \$150 per year X 2 years (years 2 through 3) for upkeep and maintenance of air outlets for one level III STEMI center = \$300 for a total of \$790 for air outlets for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level III STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 250 patients = \$100 X 3 years X one level III STEMI center = \$300 for the first 3 year period) + (masks \$2.40 X 250 patients = \$600 X 3 years X one level III STEMI center = \$1,800 for the first 3 year period) + (ambu bags \$10.50 X 50 = \$525 X 3 years X one level III STEMI center = \$1,575 for the first 3 year period) + (oxygen tank \$70 X 150 = \$10,500 X 3 years X one level III STEMI center = \$31,500 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 3 years X one level III STEMI center = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X 3 years X one level III STEMI center = \$300 for the first 3 year period) for a total of \$41,140 for the first 3 year period and (air outlet upkeep and maintenance \$150 X one level III STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 X one level III STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 250 patients X one level III STEMI center X 1 year = \$100) + (masks \$2.40 X 250 X one level III STEMI center X 1 year = \$600) + (ambu bags \$10.50 X 50 X one level III STEMI center X 1 year = \$525) + (oxygen tank \$70 X 150 X one level III STEMI center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 25 X one level II STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 250 patients X one level III STEMI center X 1 year = \$100) for a total of \$13,600 annually thereafter.

- e) Mechanical ventilator - \$7000 X one level III STEMI center = \$7,000 for the first year and \$1,500 for the annual upkeep and maintenance in the future for one level III STEMI center X 2 years (years 2 through 3) = \$3,000 for 2 years for a total of \$10,000 for the first 3 year period and \$1,500 for the upkeep and maintenance for one level III STEMI center X 1 year = \$1,500 annually thereafter.
- f) Suction devices - suction device canisters and tubing for wall suction \$50 X 250 patients = \$12,500 X one level III STEMI center = \$12,500 X 3 years = \$37,500 for the first 3 year period and \$50 X 250 patients X one level III STEMI center X 1 year = \$12,500 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 for the cost of the first year X one level III STEMI center = \$37,895 + \$1,500 for the annual upkeep and maintenance for one level III STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for upkeep and maintenance X one level III STEMI center X 1 year = \$1,500 annually thereafter.
- h) Central line insertion equipment - \$600 X 150 patients = \$90,000 X one level III STEMI center = \$90,000 X 3 years = \$270,000 for the first 3 year period and \$600 X 150 patients = \$90,000 X one level III STEMI center X 1 year = \$90,000 annually thereafter.
- i) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 250 patients = \$1,000) + (\$4.00 each for standard administration devices X 250 patients = \$1,000) + (\$4.00 each for standard intravenous catheters X 250 = \$1,000) = \$3,000 X one level III STEMI center = \$3,000 X 3 years = \$9,000 for the first 3 year period and \$3,000 X one level III STEMI center X 1 year = \$3,000 annually thereafter.
- j) Intraosseous devices - needles \$25 each X 150 patients = \$3,750 X one level III STEMI center = \$3,750 X 3 years = \$11,250 for the first 3 year period and \$25 each X 150 patients = \$3,750 X one level III STEMI center X 1 year = \$3,750 annually thereafter.
- k) Drugs necessary for STEMI emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 100 = \$10,000 X one level III STEMI center = \$10,000 X 3 years = \$30,000 for the first 3 year period and \$100 X 100 = \$10,000 X one level III STEMI center X 1 year = \$10,000 annually thereafter.
- l) Two-way communication link with emergency medical service vehicles/equipment necessary to communicate with emergency medical services regarding prehospital ECG STEMI findings - \$1,200 each X one level III STEMI center = \$1,200 for the first year + \$200 for upkeep and maintenance for one level III STEMI center X 2 years (years 2 through 3) = \$400 for a total of \$1,600 for the first 3 year period and \$200 for upkeep and maintenance X one level III STEMI center X 1 year = \$200

- annually thereafter.
- m) End-tidal carbon dioxide monitor - \$3,900 X one level III STEMI center = \$3,900 for the first year and \$1,500 for the annual upkeep and maintenance X one level III STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$6,900 for the first 3 year period and \$1,500 for the annual upkeep and maintenance X one level III STEMI center X 1 year = \$1,500 annually thereafter.
- n) Temperature control devices for patient and resuscitation fluids - \$270 pack of 10 (Bair Hugger Therapy) X 15 = \$4,050 X one level III STEMI center X 3 years = \$12,150 for the first 3 year period and \$270 pack of 10 (Bair Hugger Therapy) X 15 = \$4,050 X one level III STEMI center = \$4,050 annually thereafter.
- o) External pacemaker - \$10 per set for pacer electrodes average cost (this will be used with the cardiac defibrillator already accounted for in g above) X 30 = \$300 X one level III STEMI center X 3 years = \$900 for the first 3 year period and \$10 per set X 30 = \$300 X one level III STEMI center X 1 year = \$300 annually thereafter.
- p) Transvenous pacemaker - \$200 average cost of pacer wires and equipment X 30 = \$6,000 X one level III STEMI center X 3 years = \$18,000 + generator cost \$7,000 X 5 generators = \$35,000 for the first year + \$1,000 X 2 years (years 2 through 3) for maintenance and upkeep of generators for a total of \$37,000 for the generators and a total of \$55,000 for the first 3 year period and \$200 average cost X 30 = \$6,000 + \$1,000 for the maintenance and upkeep of the generator = \$7,000 X one level III STEMI center X 1 year = \$7,000 annually thereafter.
- q) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries) \$50 X 100 patients = \$5,000 X one level III STEMI center X 3 years = \$15,000 for the first 3 year period and \$5,000 X one level III STEMI center X 1 year = \$5,000 annually thereafter.

**Total cost for resuscitation equipment for one level III STEMI center for the emergency room department for the first 3 year period - \$1,800 (letter a above) + \$18,750 (letter b above) + \$18,750 (letter c above) + \$41,140 (letter d above) + \$10,000 (letter e above) + \$37,500 (letter f above) + \$40,895 (letter g above) + \$270,000 (letter h above) + \$9,000 (letter i above) + \$11,250 (letter j above) + \$30,000 (letter k above) + \$1,600 (letter l above) + \$6,900 (letter m above) + \$12,150 (letter n above) + \$900 (letter o above) + \$55,000 (letter p above) + \$15,000 (letter q above) = \$580,635 for the first 3 year period.**

**Total cost for resuscitation equipment for one level III STEMI center for the emergency room department for annually thereafter - \$600 (letter a above) + \$6,250 (letter b above) + \$6,250 (letter c above) + \$13,600 (letter d above) + \$1,500 (letter e above) + \$12,500 (letter f above) + \$1,500 (letter g above) + \$90,000 (letter h above) + \$3,000 (letter i above) + \$3,750 (letter j above) + \$10,000 (letter k above) +**

\$200 (letter l above) + \$1,500 (letter m above) + \$4,050 (letter n above) + \$300 (letter o above) + \$7,000 (letter p above) + \$5,000 (letter q above) = \$167,000 for annually thereafter.

3) Resuscitation equipment for the intermediate care unit –

- a) Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes - (laryngoscopes at least 2 X \$300 each = \$600 X one level III STEMI center X 3 years = \$1,800 for the first 3 year period) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 25 = \$6,250 X one level III STEMI center X 3 years = \$18,750 for the first 3 year period) + (mechanical ventilator \$7000 X one level III STEMI center X 1 year (the first year) = \$7,000 + \$1,500 for annual upkeep and maintenance of ventilator X one level III STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$10,000) for a total of \$30,550 for the first 3 year period and (laryngoscopes at least 2 X \$300 each = \$600 X one level III STEMI center X 1 year = \$600) + (endotracheal tubes of all sizes \$250 for a pack of 10 X 25 = \$6,250 X one level III STEMI center X 1 year = \$6,250) + (mechanical ventilator \$1,500 annual upkeep and maintenance X one level III STEMI center X 1 year = \$1,500) for a total of \$8,350 annually thereafter.
- b) Bag-mask resuscitator and sources of oxygen - (bag mask resuscitator \$250 for a pack of 10 X 25 packs = \$6,250 X one level III STEMI center X 3 years = \$18,750 for the first 3 year period) + (air outlet \$70 X 7 = \$490 X one level III STEMI center X 1 year (the first year) = \$490 + \$150 for annual upkeep and maintenance X one level III STEMI center X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X one level III STEMI center X 3 years = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 250 patients = \$100 X one level III STEMI center X 3 years = \$300 for the first 3 year period) + (masks \$2.40 X 250 patients = \$600 X one level III STEMI centers X 3 years = \$1,800 for the first 3 year period) + (ambu bags \$10.50 X 50 = \$525 X one level III STEMI center X 3 years = \$1,575 for the first 3 year period) + (oxygen tank \$70 X 150 = \$10,500 X one level III STEMI center X 3 years = \$31,500 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level III STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X one level III STEMI center X 3 years = \$300 for the first 3 year period) for a total of \$59,890 for the first 3 year period and (bag mask resuscitator \$250 for a pack of 10 X 25 packs = \$6,250 X one level III STEMI center X 1 year = \$6,250) + (air outlet \$150 for annual upkeep and maintenance X one level III STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level III STEMI centers X 1 year = \$875) + (nasal cannula \$.40 X 250 patients = \$100 X one level III STEMI center X 1 year = \$100) + (masks

- $\$2.40 \times 250 \text{ patients} = \$600 \times \text{one level III STEMI center} \times 1 \text{ year} = \$600$ ) + (ambu bags  $\$10.50 \times 50 = \$525 \times \text{one level III STEMI center} \times 1 \text{ year} = \$525$ ) + (oxygen tank  $\$70 \times 150 = \$10,500 \times \text{one level III STEMI center} \times 1 \text{ year} = \$10,500$ ) + (regulator for oxygen tank  $\$30 \times 25 = \$750 \times \text{one level III STEMI center} \times 1 \text{ year} = \$750$ ) + (oxygen tubing  $\$.40 \text{ for } 7 \text{ feet} \times 250 \text{ patients} = \$100 \times \text{one level III STEMI center} \times 1 \text{ year} = \$100$ ) for a total of  $\$19,850$  annually thereafter.
- c) Suction devices- suction devices canisters and tubing for wall suction  $\$50 \times 250 \text{ patients} = \$12,500 \times \text{one level III STEMI center} \times 3 \text{ years} = \$37,500$  for the first 3 year period and  $\$12,500 \times \text{one level III STEMI center} = \$12,500$  annually thereafter.
- d) Telemetry, electrocardiograph, cardiac monitor and defibrillator - (telemetry  $\$800 \times 250 \text{ patients} = \$200,000 \times \text{one level III STEMI center} \times 3 \text{ years} = \$600,000$  for the first 3 year period) + (electrocardiograph, cardiac monitor and defibrillator =  $\$37,895 \times \text{one level III STEMI centers} \times 1 \text{ year (the first year)} = \$37,895 + \$1,500$  for annual upkeep and maintenance  $\times \text{one level III STEMI center} \times 2 \text{ years (years 2 through 3)} = \$3,000$  for a total of  $\$40,895$  for the first 3 year period) for a total of  $\$640,895$  for the first 3 year period and (telemetry  $\$800 \times 250 \text{ patients} = \$200,000 \times \text{one level III STEMI center} \times 1 \text{ year} = \$200,000$ ) + ( $\$1,500$  for annual upkeep and maintenance of electrocardiograph, cardiac monitor and defibrillator  $\times \text{one level III STEMI center} \times 1 \text{ year} = \$1,500$ ) for a total of  $\$201,500$  annually thereafter.
- e) All standard intravenous fluids and administration devices and intravenous catheters - ( $\$4.00$  each for standard intravenous fluids  $\times 250 \text{ patients} = \$1,000 \times \text{one level III STEMI center} \times 3 \text{ years} = \$3,000$  for the first 3 year period) + ( $\$4.00$  each for standard administration devices  $\times 250 \text{ patients} = \$1,000 \times \text{one level III STEMI center} \times 3 \text{ years} = \$3,000$  for the first 3 year period) + ( $\$4.00$  each for standard intravenous catheters  $\times 250 \text{ patients} = \$1,000 \times \text{one level III STEMI center} \times 3 \text{ years} = \$3,000$  for the first 3 year period) for a total of  $\$9,000$  for the first 3 year period ( $\$4.00$  each for standard intravenous fluids  $\times 250 \text{ patients} = \$1,000 \times \text{one level III STEMI center} \times 1 \text{ year} = \$1,000$ ) + ( $\$4.00$  each for standard administration devices  $\times 250 \text{ patients} = \$1,000 \times \text{one level III STEMI center} \times 1 \text{ year} = \$1,000$ ) + ( $\$4.00$  each for standard intravenous catheters  $\times 250 \text{ patients} = \$1,000 \times \text{one level III STEMI center} \times 1 \text{ year} = \$1,000$ ) for a total of  $\$3,000$  annually thereafter.
- f) Drugs and supplies necessary for emergency care- e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate  $\$100 \times 100 \text{ patients} = \$10,000 \times \text{one level III STEMI center} \times 3 \text{ years} = \$30,000$  for the first 3 year period and  $\$10,000 \times \text{one level III STEMI center} \times 1 \text{ year} = \$10,000$  annually thereafter.
- g) Supplies necessary for emergency care – (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves,

batteries)  $\$50 \times 100 \text{ patients} = \$5,000 \times \text{one level III STEMI center} \times 3 \text{ years} = \$15,000$  for the first 3 year period and  $\$5,000 \times \text{one level III STEMI center} \times 1 \text{ year} = \$5,000$  annually thereafter.

Total cost for resuscitation equipment for one level III STEMI center for the intermediate care unit for the first 3 year period -  $\$30,550$  (letter a above) +  $\$59,890$  (letter b above) +  $\$37,500$  (letter c above) +  $\$640,895$  (letter d above) +  $\$9,000$  (letter e above) +  $\$30,000$  (letter f above) +  $\$15,000$  (letter g above) =  $\$822,835$  for the first 3 year period.

Total cost for resuscitation equipment for one level III STEMI center for the intermediate care unit for annually thereafter -  $\$8,350$  (letter a above) +  $\$19,850$  (letter b above) +  $\$12,500$  (letter c above) +  $\$201,500$  (letter d above) +  $\$3,000$  (letter e above) +  $\$10,000$  (letter f above) +  $\$5,000$  (letter g above) =  $\$260,200$  for annually thereafter.

- 4) Resuscitation equipment for the radiology department -
  - a) Laryngoscopes - at least 2 X  $\$300$  each =  $\$600 \times \text{one level III STEMI center} \times 3 \text{ years} = \$1,800$  for the first 3 year period and at least 2 X  $\$300$  each =  $\$600 \times \text{one level III STEMI center} \times 1 \text{ year} = \$600$  annually thereafter.
  - b) Endotracheal tubes of all sizes -  $\$250$  for a pack of 10 X 25 =  $\$6,250 \times \text{one level III STEMI center} \times 3 \text{ years} = \$18,750$  for the first 3 year period and  $\$250$  for a pack of 10 X 25 X one level III STEMI center X 1 year =  $\$6,250$  annually thereafter.
  - c) Bag-mask resuscitator -  $\$250$  for a pack of 10 X 25 packs =  $\$6,250 \times \text{one level III STEMI center} \times 3 \text{ years} = \$18,750$  for the first 3 year period and  $\$250$  for a pack of 10 X 25 packs X one level III STEMI center =  $\$6,250$  annually thereafter.
  - d) Sources of oxygen - (air outlet  $\$70 \times 7 = \$490 \times \text{one level III STEMI center} \times 1 \text{ year}$  (the first year) =  $\$490$  for the first year +  $\$150$  annual upkeep and maintenance X one level III STEMI center X 2 years (years 2 through 3) =  $\$300$  for a total of  $\$790$  for the first 3 year period) + (regulator for air outlet  $\$35 \times 25 = \$875 \times \text{one level III STEMI center} \times 3 \text{ years} = \$2,625$  for the first 3 year period) + (nasal cannula  $\$.40 \times 250 \text{ patients} = \$100 \times \text{one level III STEMI center} \times 3 \text{ years} = \$300$  for the first 3 year period) + (masks  $\$2.40 \times 250 \text{ patients} = \$600 \times \text{one level III STEMI center} \times 3 \text{ years} = \$1,800$  for the first 3 year period) + (ambu bags  $\$10.50 \times 50 = \$525 \times \text{one level III STEMI center} \times 3 \text{ years} = \$1,575$  for the first 3 year period) + (oxygen tank  $\$70 \times 150 = \$10,500 \times \text{one level III STEMI center} \times 3 \text{ years} = \$31,500$  for the first 3 year period) + (regulator for oxygen tank  $\$30 \times 25 = \$750 \times \text{one level III STEMI center} \times 3 \text{ years} = \$2,250$  for the first 3 year period) + (oxygen tubing  $\$.40$  for 7 feet X 250 patients =  $\$100 \times \text{one level III STEMI center} \times 3 \text{ years} = \$300$  for the first 3 year period)



STEMI center X 3 years = \$300 for the first 3 year period) for a total of \$41,140 for the first 3 year period and (air outlet \$70 X 7= \$490 X one level III STEMI center X 1 year = \$490) + (regulator for air outlet \$35 X 25 = \$875 X one level III STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 250 patients = \$100 X one level III STEMI center X 1 year = \$100) + (masks \$2.40 X 250 patients = \$600 X one level III STEMI center X 1 year = \$600) + (ambu bags \$10.50 X 50 = \$525 X one level III STEMI center X 1 year = \$525) + (oxygen tank \$70 X 150 = \$10,500 X one level III STEMI center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 25 = \$750 X one level III STEMI center X 1 year = \$750) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X one level III STEMI center X 1 year = \$100) for a total of \$13,940 for annually thereafter.

- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 250 patients = \$12,500 X one level III STEMI center X 3 years = \$37,500 for the first 3 year period and \$50 X 250 X one level III STEMI center X one year = \$12,500 annually thereafter.
- f) Telemetry- average of \$800 X 250 patients = \$200,000 X one level III STEMI center X 3 years = \$600,000 for the first 3 year period and \$800 X 250 patients X one level III STEMI center X 1 year = \$200,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level III STEMI center = \$37,895 X 1 year (first year) = \$37,895 for the first year + \$1,500 for the annual upkeep and maintenance X one level III STEMI centers X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for the annual upkeep and maintenance X one level III STEMI center X 1 year = \$1,500 for annually thereafter.
- h) All standard administration devices - \$4.00 each X 250 patients = \$1,000 X one level III STEMI center X 3 years = \$3,000 for the first 3 year period and \$1,000 X one level III STEMI center X 1 year = \$1,000 annually thereafter.
- i) All standard intravenous catheters - \$4.00 each X 250 patients = \$1,000 X one level III STEMI center X 3 years = \$3,000 for the first 3 year period and \$1,000 X one level III STEMI center X 1 year = \$1,000 annually thereafter.
- j) All standard intravenous fluids - \$4.00 each X 250 patients = \$1,000 X one level III STEMI center X 3 years = \$3,000 for the first 3 year period and \$1,000 X one level III STEMI center X 1 year = \$1,000 annually thereafter.
- k) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 250 patients = \$25,000 X one level III STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level III STEMI center X 1 year = \$25,000 annually thereafter.
- l) Supplies necessary for emergency care - (IV start packs, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries)



$\$50 \times 250 \text{ patients} = \$12,500 \times \text{one level III STEMI center} \times 3 \text{ years} = \$37,500 \text{ for the first 3 year period and } \$12,500 \times \text{one level III STEMI center} \times 1 \text{ year} = \$12,500 \text{ annually thereafter.}$

Total cost for resuscitation equipment for one level III STEMI center for the radiology department for the first 3 year period -  $\$1,800 \text{ (letter a above)} + \$18,750 \text{ (letter b above)} + \$18,750 \text{ (letter c above)} + \$41,140 \text{ (letter d above)} + \$37,500 \text{ (letter e above)} + \$600,000 \text{ (letter f above)} + \$40,895 \text{ (letter g above)} + \$3,000 \text{ (letter h above)} + \$3,000 \text{ (letter i above)} + \$3,000 \text{ (letter j above)} + \$75,000 \text{ (letter k above)} + \$37,500 \text{ (letter l above)} = \$880,335 \text{ for the first 3 year period.}$

Total cost for resuscitation equipment for one level III STEMI center for the radiology department for annually thereafter -  $\$600 \text{ (letter a above)} + \$6,250 \text{ (letter b above)} + \$6,250 \text{ (letter c above)} + \$13,940 \text{ (letter d above)} + \$12,500 \text{ (letter e above)} + \$200,000 \text{ (letter f above)} + \$1,500 \text{ (letter g above)} + \$1,000 \text{ (letter h above)} + \$1,000 \text{ (letter i above)} + \$1,000 \text{ (letter j above)} + \$25,000 \text{ (letter k above)} + \$12,500 \text{ (letter l above)} = \$281,540 \text{ for annually thereafter.}$

- 5) Monitoring equipment to fully support the STEMI patient during the time the patient is physically present in the radiology department and during transportation to and from the radiology department -  $(\$1,800 \text{ each} \times 4 \text{ machines} = \$7,200 \times \text{one level III STEMI center} \times 1 \text{ year (the first year)} = \$7,200) + (\$150 \text{ for upkeep and maintenance} \times 4 \text{ machines} \times 2 \text{ years (years 2 through 3)} \times \text{one level III STEMI center} = \$1,200) \text{ for a total of } \$8,400 \text{ for the first 3 year period and } \$150 \times 4 \text{ machines} \times \text{one year} \times \text{one level III STEMI center} = \$600 \text{ annually thereafter.}$
- 6) X-ray capability -  $(\$150,000 \times 1 \text{ machine} = \$150,000 \times \text{one level III STEMI center} \times 1 \text{ year (the first year)} = \$150,000) + (\$500 \text{ for upkeep and maintenance} \times 1 \text{ machine} \times 2 \text{ years (years 2 through 3)} \times \text{one level III STEMI center} = \$1,000) \text{ for a total of } \$151,000 \text{ for the first 3 year period and } \$500 \text{ for upkeep and maintenance} \times 1 \text{ machine} \times 1 \text{ year} \times \text{one level III STEMI center} = \$500 \text{ annually thereafter.}$
- 7) Laboratory Services -
  - a) Standard analyses of blood, urine and other body fluids - costs of materials  $\$200 \times 250 \text{ patients} = \$50,000 \times \text{one level III STEMI center} \times 3 \text{ years} = \$150,000 \text{ for the first 3 year period and } \$200 \times 250 \text{ patients} \times \text{one level III STEMI center} \times 1 \text{ year} = \$50,000 \text{ annually thereafter.}$
  - b) Blood typing and cross matching - centrifuge  $\$2000 \times \text{one level III STEMI center} \times 1 \text{ year (the first year)} = \$2,000 + \$250 \text{ for the annual upkeep and maintenance of the centrifuge} \times \text{one level III STEMI center} \times 2 \text{ years (years 2 through 3)} = \$500 \text{ for a total of } \$2,500 \text{ for the first 3 year period and } \$250 \text{ for the annual upkeep}$

- and maintenance of the centrifuge X one level III STEMI center X 1 year = \$250 annually thereafter.
- c) Coagulation studies - \$200 materials X 125 patients = \$25,000 X one level III STEMI center X 3 years = \$75,000 for the first 3 year period and \$200 materials X 125 patients = \$25,000 X one level III STEMI center X 1 year = \$25,000 annually thereafter.
  - d) Blood bank or access to a community central blood bank and adequate hospital blood storage facilities - at the least blood storage refrigerators 1 large refrigerator / use of community central blood bank at \$15,000 X one level III STEMI center X 1 year (the first year) = \$15,000 + \$1,500 for the annual upkeep and maintenance of the blood storage refrigerator X one level III STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$18,000 for the first 3 year period and \$1,500 for the annual upkeep and maintenance of the blood storage refrigerator X one level III STEMI center X 1 year = \$1,500 annually thereafter.
  - e) Blood gases and pH determinations- at least 1 blood gas analyzer and kit \$3000 X one level III STEMI center X 3 years = \$9,000 for the first 3 year period and \$3,000 X one level III STEMI center X 1 year = \$3,000 annually thereafter.
  - f) Blood chemistries- test and kits average of \$350 X 50 patients = \$17,500 X one level III STEMI center X 3 years = \$52,500 for the first 3 year period and \$350 X 50 patients X one level III STEMI center X 1 year = \$17,500 annually thereafter.

Total cost for laboratory services for one level III STEMI center for the first 3 year period - \$150,000 (letter a above) + \$2,500 (letter b above) + \$75,000 (letter c above) + \$18,000 (letter d above) + \$9,000 (letter e above) + \$52,500 (letter f above) = \$307,000 for the first 3 year period.

Total cost for laboratory services for one level III STEMI center for annually thereafter - \$50,000 (letter a above) + \$250 (letter b above) + \$25,000 (letter c above) + \$1,500 (letter d above) + \$3,000 (letter e above) + \$17,500 (letter f above) = \$97,250 for annually thereafter.

Total cost for medical equipment for one level III STEMI center for the first 3 year period - \$3,600 (number 1 above) + \$580,635 (number 2 above) + \$822,835 (number 3 above) + \$880,335 (number 4 above) + \$8,400 (number 5 above) + \$151,000 (number 6 above) + \$307,000 (number 7 above) = \$2,753,805 for the first 3 year period.

Total cost for medical equipment for one level III STEMI center for annually thereafter - \$1,200 (number 1 above) + \$167,000 (number 2 above) + \$260,200 (number 3 above) + \$281,540 (number 4 above) + \$600 (number 5 above) + \$500 (number 6 above) + \$97,250 (number 7 above) = \$808,290 for annually thereafter.

- D) The STEMI center shall have support services to assist the STEMI patient's family from the time of entry into the facility to the time of discharge or transfer - 1 full time equivalent medical social worker \$66,000 annually X 3 years X one level III STEMI center = \$198,000 for the first 3 year period and \$66,000 X one level III STEMI center X 1 year = \$66,000 annually thereafter.**
- E) The STEMI center shall have cardiac rehabilitation or a written network agreement for the provision of cardiac rehabilitation – at least 2 registered nurses X \$67,623 annually X one level I STEMI center X 3 years = \$405,738 for the first 3 year period and \$67,623 X 2 registered nurses X one level I STEMI center X 1 year = \$135,246 annually thereafter.**
- F) Courses/conferences for the STEMI medical director who is not board certified/board eligible shall attend one national, regional or state meeting every 3 years in cardiovascular disease.**
- a) National or international STEMI course or conference - (\$1200 registration fee) + (hotel \$1000) + (food \$ 500) + (incidental expenses \$250) = \$2,950 X no level III STEMI centers X 3 years = \$0 for the first 3 year period and \$2,950 X no level III STEMI centers X 1 year = \$0 for annually thereafter.**
  - b) Regional STEMI course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level III STEMI center = \$1,750 for the first 3 year period and \$1,750 X one level III STEMI center X 1 year = \$1,750 for annually thereafter.**
  - c) State STEMI course or conference (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level III STEMI centers X 3 years = \$0 for the first 3 year period and \$1,150 X no level III STEMI centers X 1 year = \$0 for annually thereafter.**
- G) STEMI registry**
- a) Computer with internet capability/access \$600 computer + internet fee \$100/month \$1200 annually X 3 years X one level III STEMI center = \$5,400 for the first 3 year period and \$1,800 X one level III STEMI center X 1 year = \$1,800 annually thereafter.**
  - b) Patient registrar - \$36,258 annually X 3 years X one level III STEMI center = \$108,774 for the first 3 year period and \$36,258 X one level III STEMI center X 1 year = \$36,258 annually thereafter.**
  - c) Training to set up STEMI registry system/program for data entry - \$200 annually X 3 years X one level III STEMI center = \$600 for the first 3 year period and \$200 X one level III STEMI center X 1 year = \$200 annually thereafter.**
- H) Public education program to promote STEMI prevention and STEMI symptoms awareness - e.g. community health fairs costs of printing and advertisement costs (posters, brochures etc...) \$350 for each health fair x 12 health fairs annually = \$4200 annually X 3 years X one level III STEMI**

- center = \$12,600 for the first 3 year period and \$4,200 X one level III STEMI centers X 1 year = \$4,200 annually thereafter.
- I) Patient education program to promote STEMI prevention and STEMI symptoms awareness - printing costs of brochures etc... \$500 annually X 3 years X one level III STEMI center = \$1,500 for the first 3 year period and \$500 X one level III STEMI center X 1 year = \$500 annually thereafter.
- J) Professional education outreach program in catchment areas to provide training and other supports to improve care of STEMI patients - e.g. hospitals sponsor at least 1 conference per year within their service area at the cost of \$2000 annually X 3 years X one level III STEMI center = \$6,000 for the first 3 year period and \$2,000 X one level III STEMI center X 1 year = \$2,000 annually thereafter.
- K) STEMI centers shall be actively involved in local and regional EMS systems by providing training and clinical educational resources- e.g. hospitals sponsor at least 1 conference per year within their area for EMS at the cost of \$2000 annually X 3 years X one level III STEMI center = \$6,000 for the first 3 year period and \$2,000 X one level III STEMI center X 1 year = \$2,000 annually thereafter.
- L) A lighted designated helicopter landing area at the STEMI center to accommodate incoming medical helicopters which shall be cordoned off at all times from the general public. The STEMI center shall also have a landing area on the hospital premises no more than three (3) minutes from the emergency room - (construction of helipad estimate of \$36,000 X 1 helipad X one level III STEMI centers X 1 year (the first year) = \$36,000) + (maintenance and upkeep of helipad \$2,000 X 2 years (years 2 through 3) X one level III STEMI center = \$4,000) for a total of \$40,000 for the first 3 year period for the helipad + (cordoning barrier \$4,300 X 1 year (the first year) X one level III STEMI center = \$4,300) + \$500 for maintenance and upkeep of the cordoning barrier X 2 years (years 2 through 3) X one level III STEMI centers = \$1,000) for a total of \$5,300 for the first 3 year period for the cordoning barrier for a total of \$45,300 for the first 3 year period and \$500 for maintenance and upkeep of the cordoning barrier X 1 year X one level III STEMI center = \$500 + \$500 for maintenance and upkeep of helipad X 1 year X one level III STEMI center = \$500 for a total of \$1,000 annually thereafter.

Total cost for one level III STEMI center for the first 3 year period -  
[\$14,931,192 letter A above] + [\$237,569.67 letter B above] + [\$2,753,805 letter C above] + [\$198,000 letter D above] + [\$405,738 letter E above] + [\$1,750 letter F above] + [\$114,774 letter G above] + [\$12,600 letter H above] + [\$1,500 letter I above] + [\$6,000 letter J above] + [\$6,000 letter K above] + [\$45,300 letter L above] = \$18,714,228 for the first 3 year period.

Total cost for one level III STEMI center for annually thereafter -  
[\$4,977,064 letter A above] + [\$79,189.89 letter B above] + [\$808,290 letter C above] + [\$66,000 letter D above] + [\$135,246 letter E above] + [\$1,750 letter

F above] + [\$38,258 letter G above] + [\$4,200 letter H above] + [\$500 letter I above] + [\$2,000 letter J above] + [\$2,000 letter K above] + [\$1,000 letter L above] = \$6,115,497.80 for annually thereafter.

It is expected that 6 level III STEMI centers will be designated during the first 3 year period (\$112,285,368) and those same level III STEMI centers will be designated again plus 1 additional STEMI center at some time (3 year intervals) annually thereafter (\$42,808,484.60).

#### 4. Level IV STEMI centers.

##### A. Salary costs for medical professionals.

- 1) A physician experienced in diagnosing and treating cardiovascular disease and STEMI - \$204,430 annually X one level IV STEMI center = \$204,430 X 3 years = \$613,290 for the first 3 year period and \$204,430 annually X one level IV STEMI center X 1 year = \$204,430 annually thereafter.
- 2) At least 1 other health care professional or qualified individual credentialed in STEMI care - \$126,046 annually X one level IV STEMI center = \$126,046 X 3 years = \$378,138 for the first 3 year period and \$126,046 annually X one level IV STEMI center X 1 year = \$126,046 annually thereafter.
- 3) STEMI center medical director who is recommended to be a board certified or board admissible physician - \$204,430 annually X 3 years X one level IV STEMI center = \$613,290 for the first 3 year period and \$204,430 annually X one level IV STEMI center X 1 year = \$204,430 annually thereafter.
- 4) STEMI program manager/coordinator who is a registered nurse, other clinical staff or a qualified individual - \$126,046 annually X one level IV STEMI center = \$126,046 X 3 years = \$378,138 for the first 3 year period and \$126,046 annually X one level IV STEMI center X 1 year = \$126,046 annually thereafter.
- 5) A diagnostic radiologist - \$402,539 annually X one level IV STEMI center = \$402,539 X 3 years = \$1,207,617 for the first 3 year period and \$402,539 annually X one level IV STEMI center X 1 year = \$402,539 annually thereafter.
- 6) Emergency department physician credentialed for STEMI care by the STEMI center 24 hours a day, 7 days a week - \$244,973 annually X 3 emergency department physicians X one level IV STEMI center = \$734,919 X 3 years = \$2,204,757 for the first 3 year period and \$244,973 annually X 3 physicians X one level IV STEMI center X 1 year = \$734,919 annually thereafter.
- 7) Registered nurses in the emergency department - \$64,533 annually X 5 registered nurses in the emergency department = \$322,665 X one level IV STEMI center = \$322,665 X 3 years = \$967,995 for the first 3 year period and \$322,665 X one level IV STEMI center X 1 year = \$322,665 annually thereafter.
- 8) Medical director of the emergency department - \$199,038 annually X one level IV STEMI center = \$199,038 X 3 years = \$597,114 for the

first 3 year period and \$199,038 X one level IV STEMI center X 1 year = \$199,038 annually thereafter.

- 9) Radiologist - average \$300,000 annually X 3 neurologist/radiologists = \$900,000 X one level IV STEMI center = \$900,000 X 3 years = \$2,700,000 for the first 3 year period and \$300,000 X 3 neurologists/radiologists = \$900,000 annually X one level IV STEMI center X 1 year = \$900,000 annually thereafter.
- 10) Transport nurse - average \$62,000 annually X one level IV STEMI center = \$62,000 X 4 transport nurses = \$248,000 X 3 years = \$744,000 for the first 3 year period and \$62,000 annually X 4 transport nurses X one level IV STEMI center X 1 year = \$248,000 annually thereafter.
- 11) Radiology technician - average \$62,000 annually X 4 radiology technicians = \$248,000 X one level IV STEMI center = \$248,000 X 3 years = \$744,000 for the first 3 year period and \$62,000 annually X 4 radiology technicians X one level IV STEMI center X one year = \$248,000 annually thereafter.
- 12) Nurse educator/supervisor to ensure staff are trained on core competencies - \$78,500 annually X one level IV STEMI center = \$78,500 X 3 years = \$235,500 for the first 3 year period and \$78,500 annually X one level IV STEMI center X 1 year = \$78,500 annually thereafter.

Total cost for salaries of medical professionals for one level IV STEMI center for the first 3 year period - \$613,290 (#1 above) + \$378,138 (#2 above) + \$613,290 (#3 above) + \$378,138 (#4 above) + \$1,207,617 (#5 above) + \$2,204,757 (#6 above) + \$967,995 (#7 above) + \$597,114 (#8 above) + \$2,700,000 (#9 above) + \$744,000 (#10 above) + \$744,000 (#11 above) + \$235,500 (#12 above) = \$11,383,839 for the first 3 year period.

Total cost for salaries of medical professionals for one level IV STEMI center for annually thereafter - \$204,430 (#1 above) + \$126,046 (#2 above) + \$204,430 (#3 above) + \$126,046 (#4 above) + \$402,539 (#5 above) + \$734,919 (#6 above) + \$322,665 (#7 above) + \$199,038 (#8 above) + \$900,000 (#9 above) + \$248,000 (#10 above) + \$248,000 (#11 above) + \$78,500 (#12 above) = \$3,794,613 for annually thereafter.

**B.) Continuing education for STEMI center medical staff.**

- 1) Level IV STEMI center call roster member (emergency department physician) shall complete a minimum average of 8 hours of continuing education in cardiovascular disease every 2 years - average of \$10.00 per hour for online training X 4 hours X 3 years X one level IV STEMI center = \$120 for the first 3 year period and \$10 X 4 hours X one level IV STEMI center X 1 year = \$40 annually thereafter.
- 2) Level IV STEMI center call roster member (others as appropriate) shall complete a minimum average of 8 hours of continuing education

- in cardiovascular disease every 2 years - average of \$10.00 per hour for online training X 4 hours X 3 years X one level IV STEMI center = \$120 X 2 others as appropriate = \$240 for the first 3 year period and \$10 per hour for online training X 4 hours X one level IV STEMI centers X 1 year X 2 others as appropriate = \$80 annually thereafter.
- 3) A level IV STEMI center medical director shall complete a minimum of 10 hours of continuing medical education every 2 years in the area of acute coronary syndrome - average of \$10.00 per hour for online training X 5 hours X 3 years X one level IV STEMI center = \$150 for the first 3 year period and \$10 per hour for online training X 5 hours X one level IV STEMI center X 1 year = \$50 annually thereafter.
  - 4) A level IV program manager/coordinator shall complete a minimum of 8 hours of continuing education every 2 years in cardiovascular disease - average of \$39.99 annually for online training X 3 years X one level IV STEMI center = \$119.97 for the first 3 year period and \$39.99 X one level IV STEMI center X 1 year = \$39.99 annually thereafter.
  - 5) Emergency department physicians in level IV STEMI centers shall complete a minimum average of 6 hours of continuing medical education in cardiovascular disease every 2 years - average of \$10.00 per hour for online training X 3 emergency department physicians X 3 hours of continuing medical education X 3 years X one level IV STEMI center = \$270 for the first 3 year period and \$10.00 per hour for online training X 3 emergency department physicians X 3 hours of continuing medical education X one level IV STEMI center X 1 year = \$90 annually thereafter.
  - 6) Registered nurses assigned to the emergency departments in level IV STEMI centers shall complete a minimum of 6 hours of continuing education in the area of cardiovascular disease every 2 years - average of \$39.99 annually for online training X 5 registered nurses in the emergency department X 3 years X one level IV STEMI center = \$599.85 for the first 3 year period and \$39.99 annually for online training X 5 registered nurses in the emergency department X one level IV STEMI center X 1 year = \$199.95.

Total cost for continuing education for medical staff for one level IV STEMI center for the first 3 year period - \$120 (#1 above) + \$240 (#2 above) + \$150 (#3 above) + \$119.97 (#4 above) + \$270 (#5 above) + \$599.85 (#6 above) = \$1,499.82 for the first 3 year period.

Total cost for continuing education for medical staff for one level IV STEMI center for annually thereafter - \$40 (#1 above) + \$80 (#2 above) + \$50 (#3 above) + \$39.99 (#4 above) + \$90 (#5 above) + \$199.95 (#6 above) = \$499.94 for annually thereafter.

### C.) Medical Equipment.

- 1) Electronic communication devices for STEMI call roster members - 2 electronic communication devices (cell phone and beeper/pager) X



\$300 for the annual cost of each electronic communication device X 2 STEMI call roster members carrying this device ( 1 member on call and 1 back-up member) X 3 years X one level IV STEMI center = \$3,600 for the first 3 year period and 2 electronic communication devices (cell phone and beeper/pager) X \$300 for the annual cost of each electronic communication device X 2 STEMI call roster members carrying this device (1 member on call and 1 back-up member) X one level IV STEMI center X 1 year = \$1,200 annually thereafter.

2) Resuscitation equipment for the emergency department -

- a) Laryngoscopes - at least 2 X \$300 each = \$600 X 3 years X one level IV STEMI center = \$1,800 for the first 3 year period and at least 2 X \$300 each X one level IV STEMI centers X 1 year = \$600 annually thereafter.
- b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 25 packs X 3 years X one level IV STEMI center = \$18,750 for the first 3 year period and \$250 for a pack of 10 X 25 packs X one level IV STEMI center X 1 year = \$6,250 annually thereafter.
- c) Bag-mask resuscitator - \$250 for a pack of 10 X 25 packs X 3 years X one level IV STEMI center = \$18,750 for the first 3 year period and \$250 for a pack of 10 X 25 packs X one level IV STEMI center = \$6,250 annually thereafter.
- d) Sources of oxygen - (air outlet \$70 X 7 = \$490 X one level IV STEMI center for the first year = \$490 + \$150 upkeep and maintenance of air outlet X 2 years X one level IV STEMI center = \$300 for a total of \$790 for air outlets for the first 3 year period) + (regulator for air outlet \$35 X 25 = \$875 X 3 years X one level IV STEMI center = \$2,625 for the first 3 year period) + (nasal cannula \$.40 X 250 patients = \$100 X 3 years X one level IV STEMI center = \$300 for the first 3 year period) + (masks \$2.40 X 250 patients = \$600 X 3 years X one level IV STEMI center = \$1,800 for the first 3 year period) + (ambu bags \$10.50 X 50 = \$525 X 3 years X one level IV STEMI center = \$1,575 for the first 3 year period) + (oxygen tank \$70 X 150 = \$10,500 X 3 years X one level IV STEMI center = \$31,500 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X 3 years X one level IV STEMI center = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X 3 years X one level IV STEMI center = \$300 for the first 3 year period) for a total of \$41,140 for the first 3 year period and (air outlet upkeep and maintenance \$150 X one level IV STEMI center X 1 year = \$150) + (regulator for air outlet \$35 X 25 = \$875 X one level IV STEMI center X 1 year = \$875) + (nasal cannula \$.40 X 250 patients = \$100 X one level IV STEMI center X 1 year = \$100) + (masks \$2.40 X 250 = \$600 X one level IV STEMI center X 1 year = \$600) + (ambu bags \$10.50 X 50 = \$525 X one level IV STEMI center X 1 year = \$525) + (oxygen tank \$70 X 150 = \$10,500 X one level IV STEMI center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 25 = \$750 X one level IV STEMI center X 1 year = \$750) +



(oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X one level IV STEMI center X 1 year = \$100) for a total of \$13,600 annually thereafter.

- e) Suction devices - suction devices canisters and tubing for wall suction \$50 X 250 patients = \$12,500 X 3 years X one level IV STEMI center = \$37,500 for the first 3 year period and \$50 X 250 patients X one level IV STEMI centers X 1 year = \$12,500 annually thereafter.
- f) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level IV STEMI center = \$37,895 for the first year + \$1,500 for upkeep and maintenance X 2 years (years 2 through 3) X one level IV STEMI center = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for the annual upkeep, maintenance and possible replacement X one level IV STEMI center X 1 year = \$1,500 annually thereafter.
- g) All standard intravenous fluids, all standard administration devices and all standard intravenous catheters - (\$4.00 each for standard intravenous fluids X 250 patients = \$1,000) + (\$4.00 each for standard administration devices X 250 patients = \$1,000) + (\$4.00 each for standard intravenous catheters X 250 patients = \$1,000) = \$3,000 X 3 years X one level IV STEMI center = \$9,000 for the first 3 year period and \$3,000 X one level IV STEMI center X 1 year = \$3,000 annually thereafter.
- h) Intraosseous devices - needles \$25 each X 150 patients = \$3,750 X 3 years X one level IV STEMI center = \$11,250 for the first 3 year period and \$25 each X 150 patients = \$3,750 X one level IV STEMI center X 1 year = \$3,750 annually thereafter.
- i) Drugs necessary for emergency care - e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 250 patients = \$25,000 X 3 years X one level IV STEMI center = \$75,000 for the first 3 year period and \$100 X 250 patients X one level IV STEMI center X 1 year = \$25,000 annually thereafter.
- j) Two-way communication link with emergency medical service vehicles - \$1,200 apiece X 1 vehicle = \$1,200 X one level IV STEMI center X 1 year (the first year) = \$1,200 + \$150 for upkeep and maintenance X 2 years (years 2 through 3) X one level IV STEMI center = \$300 for a total of \$1,500 for the first 3 year period and \$150 X one level IV STEMI center X 1 year = \$150 annually thereafter.
- k) End-tidal carbon dioxide monitor - \$3,900 X one level IV STEMI centers X 1 year (the first year) = \$3,900 + \$1,500 for the annual upkeep and maintenance X one level IV STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$6,900 for the first 3 year period and \$1500 X one level IV STEMI centers X 1 year = \$1,500 annually thereafter.
- l) Temperature control devices for patient and resuscitation fluids \$270 pack of 10 (Bair Hugger Therapy) X 15 = \$4,050 X 3 years X one level IV STEMI center = \$12,150 for the first 3 year period and \$270 pack of 10 (Bair Hugger Therapy) X 15 = \$4,050 X one level IV STEMI center X 1 year = \$4,050

annually thereafter.

- m) External pacemaker - \$10 per set for pacer electrodes average cost (this will be used with the cardiac defibrillator already accounted for in f above) X 15 = \$150 X one level IV STEMI center X 3 years = \$450 for the first 3 year period and \$10 per set X 15 = \$150 X one level IV STEMI center X 1 year = \$150 annually thereafter.

Total cost for resuscitation equipment for the emergency department for one level IV STEMI center for the first 3 year period - \$1,800 (letter a above) + \$18,750 (letter b above) + \$18,750 (letter c above) + \$41,140 (letter d above) + \$37,500 (letter e above) + \$40,895 (letter f above) + \$9,000 (letter g above) + \$11,250 (letter h above) + \$75,000 (letter i above) + \$1,500 (letter j above) + \$6,900 (letter k above) + \$12,150 (letter l above) + \$450 (letter m above) = \$275,085 for the first 3 year period.

Total cost for resuscitation equipment for the emergency department for one level IV STEMI center for annually thereafter - \$600 (letter a above) + \$6,250 (letter b above) + \$6,250 (letter c above) + \$13,600 (letter d above) + \$12,500 (letter e above) + \$1,500 (letter f above) + \$3,000 (letter g above) + \$3,750 (letter h above) + \$25,000 (letter i above) + \$150 (letter j above) + \$1,500 (letter k above) + \$4,050 (letter l above) + \$150 (letter m above) = \$78,300 annually thereafter.

- 3) Resuscitation equipment for the radiology department -
- a) Laryngoscopes- at least 2 X \$300 each = \$600 X one level IV STEMI center X 3 years = \$1,800 for the first 3 year period and at least 2 X \$300 each = \$600 X one level IV STEMI center X 1 year = \$600 annually thereafter.
  - b) Endotracheal tubes of all sizes - \$250 for a pack of 10 X 25 = \$6,250 X one level IV STEMI center X 3 years = \$18,750 for the first 3 year period and \$250 for a pack of 10 X 25 X one level IV STEMI center X 1 year - \$6,250 annually thereafter.
  - c) Bag-mask resuscitator - \$250 for a pack of 10 X 25 packs = \$6,250 X one level IV STEMI center X 3 years = \$18,750 for the first 3 year period and \$250 for a pack of 10 X 25 packs X one level IV STEMI center X 1 year = \$6,250 annually thereafter.
  - d) Sources of oxygen - (air outlets \$70 X 7 = \$490 X one level IV STEMI center X 1 year (the first year) = \$490 for the first year + \$150 annual upkeep and maintenance X one level IV STEMI centers X 2 years (years 2 through 3) = \$300 for a total of \$790 for the first 3 year period) + (regulator for air outlet \$35 X 15 = \$525 X one level IV STEMI center X 3 years = \$1,575 for the first 3 year period) + (nasal cannula \$.40 X 250 patients = \$100 X one level IV STEMI center X 3 years = \$300 for the first 3 year period) + (masks \$2.40 X 250 patients = \$600 X one level IV STEMI center X 3 years = \$1,800 for the first 3 year period) + (ambu bags \$10.50 X 50 = \$525 X one level IV STEMI center X 3 years = \$1,575 for the

first 3 year period) + (oxygen tank \$70 X 150 = \$10,500 X one level IV STEMI center X 3 years = \$31,500 for the first 3 year period) + (regulator for oxygen tank \$30 X 25 = \$750 X one level IV STEMI center X 3 years = \$2,250 for the first 3 year period) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X one level IV STEMI center X 3 years = \$300 for the first 3 year period) for a total of \$40,090 for the first 3 year period and (air outlets \$70 X 7 = \$490 X one level IV STEMI center X 1 year = \$490) + (regulator for air outlet \$35 X 15 = \$525 X one level IV STEMI center X 1 year = \$525) + (nasal cannula \$.40 X 250 patients = \$100 X one level IV STEMI center X 1 year = \$100) + (masks \$2.40 X 250 patients = \$600 X one level IV STEMI center X 1 year = \$600) + (ambu bags \$10.50 X 50 = \$525 X one level IV STEMI center X 1 year = \$525) + (oxygen tank \$70 X 150 = \$10,500 X one level IV STEMI center X 1 year = \$10,500) + (regulator for oxygen tank \$30 X 15 = \$450 X one level IV STEMI center X 1 year = \$450) + (oxygen tubing \$.40 for 7 feet X 250 patients = \$100 X one level IV STEMI center X 1 year = \$100) for a total of \$13,290 for annually thereafter.

- e) Suction devices – suction device canisters and tubing for wall suction \$50 X 250 patients = \$12,500 X one level IV STEMI center X 3 years = \$37,500 for the first 3 year period and \$50 X 250 X one level IV STEMI center X 1 year = \$12,500 annually thereafter.
- f) Telemetry – average of \$800 X 250 patients = \$200,000 X one level IV STEMI center X 3 years = \$600,000 for the first 3 year period and \$800 X 250 patients X one level IV STEMI center X 1 year = \$200,000 annually thereafter.
- g) Electrocardiograph, cardiac monitor and defibrillator - \$37,895 X one level IV STEMI center = \$37,895 X 1 year (first year) = \$37,895 for the first year + \$1,500 for the annual upkeep and maintenance X one level IV STEMI center X 2 years (years 2 through 3) = \$3,000 for a total of \$40,895 for the first 3 year period and \$1,500 for the annual upkeep and maintenance X one level IV STEMI center X 1 year = \$1,500 for annually thereafter.
- h) All standard administration devices - \$4.00 each X 250 patients = \$1,000 X one level IV STEMI center X 3 years = \$3,000 for the first 3 year period and \$1,000 X one level IV STEMI center X 1 year = \$1,000 annually thereafter.
- i) All standard intravenous catheters - \$4.00 each X 250 patients = \$1,000 X one level IV STEMI center X 3 years = \$3,000 for the first 3 year period and \$1,000 X one level IV STEMI center X 1 year = \$1,000 annually thereafter.
- j) Drugs necessary for emergency care – e.g. saline, epinephrine, atropine, lidocaine, magnesium sulfate \$100 X 250 patients = \$25,000 X one level IV STEMI center X 3 years = \$75,000 for the first 3 year period and \$25,000 X one level IV STEMI center X 1 year = \$25,000 annually thereafter.

- k) Supplies necessary for emergency care – (IV start pack, IV tubing, syringes, gauze alcohol preps, light bulbs, exam gloves, batteries)  
 $\$50 \times 250 \text{ patients} = \$12,500 \times \text{one level IV STEMI center} \times 3 \text{ years} = \$37,500 \text{ for the first 3 year period and } \$12,500 \times \text{one level IV STEMI center} \times 1 \text{ year} = \$12,500 \text{ annually thereafter.}$

Total cost for resuscitation equipment for one level IV STEMI center for the radiology department for the first 3 year period -  $\$1,800 \text{ (letter a above)} + \$18,750 \text{ (letter b above)} + \$18,750 \text{ (letter c above)} + \$40,090 \text{ (letter d above)} + \$37,500 \text{ (letter e above)} + \$600,000 \text{ (letter f above)} + \$40,895 \text{ (letter g above)} + \$3,000 \text{ (letter h above)} + \$3,000 \text{ (letter i above)} + \$75,000 \text{ (letter j above)} + \$37,500 \text{ (letter k above)} = \$876,285 \text{ for the first 3 year period.}$

Total cost for resuscitation equipment for one level IV STEMI center for the radiology department for annually thereafter -  $\$600 \text{ (letter a above)} + \$6,250 \text{ (letter b above)} + \$6,250 \text{ (letter c above)} + \$13,290 \text{ (letter d above)} + \$12,500 \text{ (letter e above)} + \$200,000 \text{ (letter f above)} + \$1,500 \text{ (letter g above)} + \$1,000 \text{ (letter h above)} + \$1,000 \text{ (letter i above)} + \$25,000 \text{ (letter j above)} + \$12,500 \text{ (letter k above)} = \$279,890 \text{ for annually thereafter.}$

- 4) Monitoring equipment to fully support the STEMI patient during the time the patient is physically present in the radiology department and during transportation to and from the radiology department –  $(\$1,800 \text{ each} \times 4 \text{ machines} = \$7,200 \times \text{one level IV STEMI center} \times 1 \text{ year (the first year)} = \$7,200) + (\$150 \text{ for upkeep and maintenance} \times 4 \text{ machines} \times 2 \text{ years (years 2 through 3)} \times \text{one level IV STEMI center} = \$1,200) \text{ for a total of } \$8,400 \text{ for the first 3 year period and } \$150 \times 4 \text{ machines} \times 1 \text{ year} \times \text{one level IV STEMI center} = \$600 \text{ annually thereafter.}$
- 5) X-ray capability –  $(\$150,000 \times 1 \text{ machine} = \$150,000 \times \text{one level IV STEMI center} \times 1 \text{ year (the first year)} = \$150,000) + \$500 \text{ for upkeep and maintenance} \times 1 \text{ machine} \times 2 \text{ years (years 2 through 3)} \times \text{one level IV STEMI center} = \$1,000) \text{ for a total of } \$151,000 \text{ for the first 3 year period and } \$500 \text{ for upkeep and maintenance} \times 1 \text{ machine} \times 1 \text{ year} \times \text{one level IV STEMI center} = \$500 \text{ annually thereafter.}$
- 6) Laboratory Services-
- a) Standard analyses of blood, urine and other body fluids - costs of materials  $\$200 \times 250 \text{ patients} = \$50,000 \times 3 \text{ years} \times \text{one level IV STEMI center} = \$150,000 \text{ for the first 3 year period and } \$50,000 \times \text{one level IV STEMI center} \times 1 \text{ year} = \$50,000 \text{ annually thereafter.}$
  - b) Coagulation studies -  $\$200 \text{ materials} \times 250 \text{ patients} = \$50,000 \times 3 \text{ years} \times \text{one level IV STEMI center} = \$150,000 \text{ for the first 3 year period and } \$50,000 \times \text{one level IV STEMI center} \times 1 \text{ year} = \$50,000 \text{ annually thereafter.}$
  - c) Blood bank or access to a community central blood bank and adequate hospital blood storage facilities - at the least blood

storage refrigerators 1 large refrigerator/use of community central blood bank at \$15,000 X one level IV STEMI center X 1 year (the first year = \$15,000 for the first year + \$1,500 X 2 years (years 2 through 3) X one level IV STEMI center = \$3,000 for a total of \$18,000 for the first 3 year period and \$1,500 X one level IV STEMI center X one year = \$1,500 annually thereafter.

d) Blood gases and pH determinations - at least 1 blood gas analyzer and kit \$3000 X 3 years X one level IV STEMI center = \$9,000 for the first 3 year period and \$3,000 X one level IV STEMI center X 1 year = \$3,000 annually thereafter.

e) Blood chemistries - test and kits average of \$350 X 100 patients = \$35,000 X 3 years X one level IV STEMI center = \$105,000 for the first 3 year period and \$35,000 X one level IV STEMI center X 1 year = \$35,000 annually thereafter.

Total cost for laboratory services for one level IV STEMI center for the first 3 year period - \$150,000 (letter a above) + \$150,000 (letter b above) + \$18,000 (letter c above) + \$9,000 (letter d above) + \$105,000 (letter e above) = \$432,000 for the first 3 year period.

Total cost for laboratory services for one level IV STEMI center for annually thereafter - \$50,000 (letter a above) + \$50,000 (letter b above) + \$1,500 (letter c above) + \$3,000 (letter d above) + \$35,000 (letter e above) = \$139,500 for annually thereafter.

Total cost for medical equipment for one level IV STEMI center for the first 3 year period - \$3,600 (number 1 above) + \$275,085 (number 2 above) + \$876,285 (number 3 above) + \$8,400 (number 4 above) + \$151,000 (number 5 above) + \$432,000 (number 6 above) = \$1,746,370 for the first 3 year period.

Total cost for medical equipment for one level IV STEMI center for annually thereafter - \$1,200 (number 1 above) + \$78,300 (number 2 above) + \$279,890 (number 3 above) + \$600 (number 4 above) + \$500 (number 5 above) + \$139,500 (number 6 above) = \$499,990 for annually thereafter.

**D. The STEMI center shall have support services to assist the patient's family from time of entry into the facility to time of discharge - at least 1 full time equivalent medical social worker \$66,000 annually X 3 years X one level IV STEMI center = \$198,000 for the first 3 year period and \$66,000 X one level IV STEMI center X 1 year = \$66,000 annually thereafter.**

**E. Courses/conferences for STEMI medical directors who are not board certified-**

1) National or international STEMI course or conference - (\$1200 registration fee) + (hotel \$1000) + (food \$500) + (incidental expenses \$250) = \$2,950 X no level IV STEMI centers = \$0 for the

first 3 year period and \$2,950 X no level IV STEMI centers X 1 year = \$0 annually thereafter.

- 2) Regional STEMI course or conference - (\$700 registration fee) + (hotel \$600) + (food \$200) + (incidental expenses \$250) = \$1,750 X one level IV STEMI center = \$1,750 for the first 3 year period and \$1,750 X one level IV STEMI center X 1 year = \$1,750 annually thereafter.
- 3) State STEMI course or conference (\$300 registration fee) + (hotel \$400) + (food \$200) + (incidental expenses \$250) = \$1,150 X no level IV STEMI centers = \$0 for the first 3 year period and \$1,150 X no level IV STEMI centers X 1 year = \$0 annually thereafter.

**F. STEMI registry**

- a) Computer with internet capability/access \$600 computer + internet fee \$100/month \$1200 annually X 3 years X one level IV STEMI center = \$5,400 for the first 3 year period and \$1,800 X one level IV STEMI center X 1 year = \$1,800 annually thereafter.
- b) Patient registrar - \$36,258 annually X 3 years X one level IV STEMI center = \$108,774 for the first 3 year period and \$36,258 X one level IV STEMI center X 1 year = \$36,258 annually thereafter.
- c) Training to set up STEMI registry system/program for data entry- \$200 annually X 3 years X one level IV STEMI center = \$600 for the first 3 year period and \$200 X one level IV STEMI center X 1 year = \$200 annually thereafter.

**G. Public education program to promote STEMI prevention and STEMI symptoms awareness - e.g. community health fairs costs of printing and advertisement costs (posters, brochures etc...) \$350 for each health fair X 12 health fairs annually X 3 years = \$12,600 annually X one level IV STEMI center = \$12,600 for the first 3 year period and \$4,200 annually X one level IV STEMI center X 1 year = \$4,200 annually thereafter.**

**H. Patient education program to promote STEMI prevention and STEMI symptoms awareness - printing costs of brochures etc... \$500 annually X 3 years X one level IV STEMI center = \$1,500 for the first 3 year period and \$500 X one level IV STEMI center X 1 year = \$500 annually thereafter.**

**I. STEMI centers shall be actively involved in local and regional EMS systems by providing training and clinical educational resources - hospitals sponsor at least 1 conference per year within their area for EMS at the cost of \$2000 annually X 3 years X one level IV STEMI center = \$6,000 for the first 3 year period and \$2,000 X one level IV STEMI center X 1 year = \$2,000 annually thereafter.**

**J. A lighted designated helicopter landing area at the STEMI center to accommodate incoming medical helicopters which shall be cordoned off at all times from the general public. The STEMI center shall also have a landing area on the hospital premises no more than three (3) minutes from the emergency room - (construction of helipad estimate of \$36,000**

X 1 helipad X one level IV STEMI center X 1 year (the first year) = \$36,000) + (maintenance and upkeep of helipad \$2,000 X 2 years (years 2 through 3) X one level IV STEMI center = \$4,000) for a total of \$40,000 for the first 3 year period for the helipad + (cordoning barrier \$4,300 X 1 year (the first year) X one level IV STEMI center = \$4,300) + \$500 for maintenance and upkeep of the cordoning barrier X 2 years (years 2 through 3) X one level IV STEMI center = \$1,000) for a total of \$5,300 for the first 3 year period for the cordoning barrier for a total of \$45,300 for the first 3 year period and \$500 for maintenance and upkeep of the cordoning barrier X 1 year X one level IV STEMI center = \$500 + \$500 for maintenance and upkeep of helipad X 1 year X one level IV STEMI center = \$500 for a total of \$1,000 annually thereafter.

Total cost for one level IV STEMI center for the first 3 year period - \$11,383,839 (letter A above) + \$1,499.82 (letter B above) + \$1,746,370 (letter C above) + \$198,000 (letter D above) + \$1,750 (letter E above) + \$114,774 (letter F above) + \$12,600 (letter G above) + \$1,500 (letter H above) + \$6,000 (letter I above) + \$45,300 (letter J above) = \$13,511,632 for the first 3 year period.

Total cost for one level IV STEMI center for annually thereafter - \$3,794,613 (letter A above) + \$499.94 (letter B above) + \$499,990 (letter C above) + \$66,000 (letter D above) + \$1,750 (letter E above) + \$38,258 (letter F above) + \$4,200 (letter G above) + \$500 (letter H above) + \$2,000 (letter I above) + \$1,000 (letter J above) = \$4,408,810.90 for annually thereafter.

It is expected that 6 level IV STEMI centers will be designated during the first 3 year period (\$81,069,792) and those same level IV STEMI centers plus 1 additional STEMI center will be designated again at some time (3 year intervals) annually thereafter (\$30,861,676.30).

Total costs for the first 3 year period - (\$169,522,653 Level I - number 1 above) + (\$205,296,644 Level II - number 2 above) + (\$112,285,368 Level III - number 3 above) + (\$81,069,792 Level IV - number 4 above) = \$568,174,457 for the first 3 year period.

Total costs for annually thereafter - (\$54,072,849 Level I - number 1 above) + (\$65,172,612 Level II - number 2 above) + (\$42,808,484.60 Level III - number 3 above) + (\$30,861,676.30 Level IV - number 4 above) = \$192,915,621.90 for annually thereafter. This number has been rounded up.

#### IV. ASSUMPTIONS

The staffing and equipment requirements for designated STEMI centers are based on recommendations from a task force comprised of physicians and other health



care providers from hospitals and emergency medical services agencies throughout the state and national standards and guidelines for STEMI centers.

Participation in Missouri's STEMI center program is voluntary and no hospital shall be required to participate. However, if a hospital chooses to apply to be designated as a STEMI center and would like to hold itself out as a state designated STEMI center, then it must apply for, be approved, comply with the applicable statutes and regulations and bear the costs detailed in this fiscal note. The costs in this fiscal note are for those hospitals which apply for and are approved to be a state designated STEMI center. Also, it is important to note that those hospitals applying for the appropriate levels of STEMI centers already have most of these items detailed in this fiscal note. This is explained throughout this assumption section below.

To obtain the potential numbers of STEMI centers that might be applying in the future to be a state designated STEMI center, the Department of Health and Senior Services used the number of state designated trauma centers as a guide. The Missouri trauma center program has been in effect since 1998. It should be noted that there are only 3 levels of trauma centers currently in Missouri (Level I, Level II and Level III). In addition, the proposed STEMI center numbers are greater than the number of proposed stroke center numbers as there has been more interest expressed by hospitals to the Department of Health and Senior Services for the STEMI center designation than for the stroke center designation.

There are approximately 148 private hospitals in Missouri.

Costs are estimated for a 3 year period because the designation for STEMI centers will be for a period of 3 years.

Salaries are based on average salaries as reported by salary.com available on the Internet.

Staffing is based on minimum level required by this rule. Some hospitals may choose to have additional staff as they deem appropriate to maintain levels of patient care.

Equipment costs are based on minimum levels required by the rule. These equipment costs are based on the amount it would cost to purchase these items through medical equipment suppliers.

Costs are expected to increase at an average rate of inflation.

The Department of Health and Senior Services estimated that there will be at least 3 designated level I private hospital STEMI centers during the first 3 year period and these same level I STEMI centers will be designated annually thereafter.

The Department of Health and Senior Services estimated that there will be at least 4 designated level II private hospital STEMI centers during the first 3 year period and these same level II centers will be designated annually thereafter.



The Department of Health and Senior Services estimated that there will be at least 6 designated level III private hospital STEMI centers during the first 3 year period and these same 6 level III STEMI centers plus 1 additional STEMI center will be designated annually thereafter.

The Department of Health and Senior Services estimated that there will be at least 6 designated level IV private hospital STEMI centers during the first 3 year period and these same 6 level IV STEMI centers plus 1 additional STEMI center will be designated annually thereafter.

Many of the hospitals requesting to be a state designated STEMI center are going to have several of the required medical professionals already on staff so the costs of the medical professionals will probably not be a new cost to many hospitals. However, for hospitals without current STEMI centers, the STEMI medical director (required of levels I-IV), the STEMI program manager (required for levels I-IV), staff required for the intermediate care unit (required for levels I -III), an interventional cardiologist (required for level I and II's with cardiothoracic surgery capability) and a nurse educator to ensure staff meet core competencies (required for levels I-IV) might be new costs to these STEMI centers.

Physicians are required to complete continuing medical education pursuant to the STEMI regulations; however, this will most likely not be a new cost to physicians as physicians licensed in Missouri are required to complete 50 hours of continuing medical education every 2 years. Further, when figuring the costs of the continuing medical education and continuing education, the Department of Health and Senior Services used costs for online training. It should be noted that there are many free continuing education opportunities throughout the state of Missouri annually for both physicians and nurses. In addition, many physicians are independent from the hospitals and will incur these costs personally instead of the hospital incurring these costs.

Resuscitation equipment costs were detailed for each department for which resuscitation was required to be available. However, level I STEMI centers will already have a cardiac catheterization laboratory, an emergency department, an intensive care unit, a radiology department, an operating room, and a post-anesthesia recovery room and many will already have an intermediate care (step-down) unit. It is reasonable to believe that all of these departments currently existing in these hospitals already have resuscitation equipment so these costs will most likely not be new costs to level I STEMI centers.

For level II STEMI centers, it is likely the hospital requesting to be a level II STEMI center will already have an emergency department, an intensive care unit, a radiology department, an operating room and a post-anesthesia recovery room. Further these departments will already have the required resuscitation equipment.

For level III STEMI centers, it is likely the hospital requesting to be a level III STEMI center will already have an emergency department and a radiology department. Further, these departments will already have the required resuscitation equipment.

**For level IV STEMI centers, it is likely the hospital requesting to be a level IV STEMI center will already have an emergency department and a radiology department. Further this emergency department will already have the required resuscitation equipment.**

**For level I and II STEMI centers, it is very likely the hospitals requesting to be a level I, or II STEMI center will already have a Computerized Tomography (CT) scan so this will not be a new cost to these STEMI centers.**

**For level I, II and III STEMI centers, it is very likely the hospitals requesting to be a level I, II or III STEMI center will already have X-ray capability in the radiology department and the operating room so this will not be a new cost to these STEMI centers.**

**For level I STEMI centers, it is very likely the hospitals will already have a functioning cardiac catheterization laboratory and therefore the resuscitation equipment and other equipment required to be in the laboratory will already have been purchased by level I STEMI centers.**

**For levels I, II, III and IV STEMI centers, it is very likely the hospitals requesting to be said STEMI centers will already have the equipment and ability to conduct laboratory analyses required for these STEMI centers so this should not be a new cost to these STEMI centers.**

**For level I, II, III and IV STEMI centers, it is likely that these hospitals already have a social worker providing support services in place, so this will not be a new cost for the STEMI centers.**

**For level I and II STEMI centers, it is likely that these hospitals already have a rehabilitation program in place, so this will not be a new cost for the STEMI centers.**

**For level I and II STEMI centers, it is likely the hospitals already have the required operating room equipment, so this will not be a new cost to the STEMI centers.**

**It is very likely members on the STEMI call roster are already going to be carrying electronic communications devices (a cell phone and beeper). Thus, it is likely these charges in Levels I, II, III and IV STEMI centers won't be a new cost to the STEMI centers.**

**Title 19—DEPARTMENT OF HEALTH AND  
SENIOR SERVICES  
Division 30—Division of Regulation and Licensure  
Chapter 40—Comprehensive Emergency Medical  
Services Systems Regulations**

**PROPOSED RULE**

**19 CSR 30-40.770 Community-based or Regional Plan for  
Emergency Medical Services for Trauma, ST-Segment Elevation  
Myocardial Infarction (STEMI), or Stroke**

*PURPOSE: This rule establishes the procedures for the submission of a community-based or regional plan for the transportation of patients to stroke, STEMI, or trauma centers.*

(1) A community or region developing its own transportation plan for stroke, STEMI, and trauma patients may submit a plan at any time and shall ensure that it complies with section 190.200.3., RSMo. Such a plan shall also—

(A) Identify the geographic boundaries of the area covered by the plan;

(B) Designate, and provide contact information for, an individual, plan's designee who will serve as the plan's point of contact throughout the plan's approval and administration process; and

(C) Identify individuals involved in the drafting, planning, and/or consultation of the plan, who shall collectively be known as the "planning committee."

(2) Upon completion of a community-based or regional plan, the plan shall be submitted to the chair of the regional emergency medical services advisory committee defined by section 190.102, RSMo, and the regional emergency medical services medical director defined by section 190.103, RSMo, for the geographic area covered by the plan. Upon receipt of a plan submitted pursuant to the provisions of section 190.200, RSMo, the chair and medical director shall forward the plan to the emergency medical services medical director's advisory committee (the committee) as defined by section 190.103, RSMo, for consideration. Within forty-five (45) days of receipt of a community-based or regional plan, the committee shall meet and complete its review of the plan. Upon a finding of good cause, the chair of the committee may grant the committee a reasonable extension of time for review of the plan.

(3) In reviewing a community-based or regional plan, the committee shall determine whether the plan meets the requirements of section 190.200.3., RSMo, and this rule.

(4) At the conclusion of its review, the committee shall vote on the question of whether to recommend or not recommend the plan for approval. If a majority of the committee votes to recommend the plan for approval, said recommendation shall constitute *prima facie* evidence that the plan meets the requirements of section 190.200.3., RSMo, and should be approved. The committee shall attach such conditions (such as regular analysis and reporting of medical outcomes to the committee) to its recommendation for approval as it deems appropriate to ensure that the plan continues to meet the requirements of Chapter 190, RSMo. If a majority of the committee votes to not recommend the plan, that decision, with an explanation of the reason(s) for the decision, shall be provided in writing to the plan's designee. A community or region receiving a non-recommendation by the committee may modify its plan according to the committee's reason(s) for non-recommendation and resubmit the plan within thirty (30) days directly to the committee.

(5) Following recommendation of a community-based or regional plan, the committee shall forward the plan to the Director of the Department of Health and Senior Services (director) for approval.

The director shall have thirty (30) days to review the plan for its compliance with section 190.200.3., RSMo. At the conclusion of the review, the director shall approve or disapprove the plan. If the director disapproves the plan, the reason(s) for disapproval shall be provided in writing to the plan's designee. The director's decision shall be the final agency action. A community or region whose plan is not approved by the director may modify its plan according to the director's reason(s) for disapproval and resubmit the plan within thirty (30) days directly to the committee and follow the approval process as outlined herein.

(6) Once a plan is approved by the director, the planning committee shall—

(A) Notify all agencies impacted by the plan of the manner in which emergency medical care is modified within the region based on the plan;

(B) Monitor per the plan the related medical and system outcomes and regional resources and capacity;

(C) Revise the plan when indicated based on medical and system outcomes, emerging clinical research or guidelines, or when revision is indicated based on changes in capacity or other related issues and submit through the approval process as outlined herein; and

(D) Notify the committee and department at least thirty (30) days before ceasing to use the plan.

*AUTHORITY: section 192.006, RSMo 2000, and sections 190.185 and 190.241, RSMo Supp. 2012. Original rule filed Nov. 15, 2012.*

*PUBLIC COST: This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.*

*PRIVATE COST: This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate.*

*NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed rule with Teresa Generous, Director, Department of Health and Senior Services, Division of Regulation and Licensure, PO Box 570, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the Missouri Register. No public hearing is scheduled.*

**Title 19—DEPARTMENT OF HEALTH AND  
SENIOR SERVICES  
Division 30—Division of Regulation and Licensure  
Chapter 40—Comprehensive Emergency Medical  
Services Systems Regulations**

**PROPOSED RULE**

**19 CSR 30-40.780 Definitions and Abbreviations Relating to the  
Transport Protocol for Stroke and the Transport Protocol for ST-  
Segment Elevation Myocardial Infarction (STEMI) Patients**

*PURPOSE: This rule defines terminology related to the state transport protocol for stroke and the state transport protocol for STEMI.*

(1) The following definitions and abbreviations shall be used in the interpretation of the rule in 19 CSR 30-40.790:

(A) Field is the specific area or location, outside of the hospital, where an injury, accident, or medical emergency occurs requiring immediate assistance of medical personnel for the purpose of treating or transporting the sick or injured to another location for treatment;

(B) Local and regional process is the process that has been established and agreed upon specifically pertaining to a local city, town,

or small district, or a combination of localities forming a regional area. This is not the community-based or regional plan;

(C) Lytics are thrombolytic drugs, including recombinant tissue plasminogen activator, used to dissolve clots blocking flow in a blood vessel. These lytic/thrombolytic drugs are used in the treatment of acute ischemic stroke and acute myocardial infarction;

(D) Lytic/therapeutic window is the period of time during which lytics can be administered following the onset of symptoms in order to reduce brain or heart injury;

(E) Lytic therapy (fibrinolysis/thrombolysis) is drug therapy used to dissolve clots blocking flow in a blood vessel. It refers to drugs used for that purpose, including recombinant tissue plasminogen activator. This type of therapy can be used in the treatment of acute ischemic stroke and acute myocardial infarction;

(F) Lytic/thrombolytic ineligible patients are those patients identified as ineligible for lytic/thrombolytic therapy due to specific contraindications. An appropriate course of treatment will be utilized when lytic/thrombolytic therapy is contraindicated;

(G) Out of the lytic/therapeutic or potential therapeutic window is the period of time following the accepted time (lytic/therapeutic window and potential therapeutic window) frames for specific therapies for a patient suffering an ischemic stroke;

(H) Outside of the percutaneous coronary intervention (PCI) window is the period of time following the accepted time frame in which PCI is most advantageous and recommended;

(I) Percutaneous coronary intervention (PCI) is a procedure used to open or widen narrowed or blocked blood vessels to restore blood flow supplying the heart;

(J) Percutaneous coronary intervention (PCI) window is a time frame in which PCI is most advantageous and recommended;

(K) Potential therapeutic window is the period of time after the accepted window for lytic therapy has expired in which interventional therapy may be beneficial in restoring blood flow during an ischemic stroke; and

(L) Recombinant tissue plasminogen activator (t-PA also known as rt-PA) is a thrombolytic (clot-dissolving) agent, the goal of which is to destroy the thrombus (clot) within the blood vessel by stimulating fibrinolysis (clot breakdown) to allow restoration of blood flow.

**AUTHORITY:** sections 190.185 and 190.241, RSMo Supp. 2012. Original rule filed Nov. 15, 2012.

**PUBLIC COST:** This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

**PRIVATE COST:** This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate.

**NOTICE TO SUBMIT COMMENTS:** Anyone may file a statement in support of or in opposition to this proposed rule with Teresa Generous, Director, Department of Health and Senior Services, Division of Regulation and Licensure, PO Box 570, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the *Missouri Register*. No public hearing is scheduled.

**Title 19—DEPARTMENT OF HEALTH AND  
SENIOR SERVICES  
Division 30—Division of Regulation and Licensure  
Chapter 40—Comprehensive Emergency Medical  
Services Systems Regulations**

**PROPOSED RULE**

**19 CSR 30-40.790 Transport Protocol for Stroke and ST-Segment  
Elevation Myocardial Infarction (STEMI) Patients**

**PURPOSE:** This rule establishes protocols for transporting suspected STEMI patients by severity and time of onset to the STEMI center where resources exist to provide appropriate care and suspected stroke patients by severity and time of onset to the stroke center where resources exist to provide appropriate care.

(1) All ground and air ambulances shall use the following state transport protocol for suspected stroke patients except in those circumstances listed in sections (3), (4), and (5) of this rule:

(A) Step 1—Assess for life threatening conditions (serious airway or respiratory compromise or immediate life threatening conditions that cannot be managed in the field).

1. If there are life threatening conditions, transport the patient to the nearest appropriate facility for stabilization prior to transport to a stroke center. Consider air/ground/facility options for timely and medically appropriate care (particularly in non-urban areas).

2. If there are no life threatening conditions, go to step 2 below in subsection (1)(B); and

(B) Step 2—Assess the duration of onset of symptoms (time last known well).

1. Group 1—If the patient is within the lytic/therapeutic window then transport to a level I, II, or III stroke center according to local and regional process. Consider the time for transport, the patient's condition, air/ground/hospital options for timely and medically appropriate care (particularly in non-urban areas), and the treatment windows. Continue to reassess the patient. If the patient's condition changes, then start back with subsection (1)(A) and follow the state stroke protocol outlined in section (1) starting from subsection (1)(A) and on according to the patient's condition. Consider out-of-state transport based on local and regional process for bi-state regions.

2. Group 2—If the patient is within the potential therapeutic window then transport to a level I stroke center or transport to a level I, II, or III stroke center according to local and regional process. Consider the time for transport, the patient's condition, air/ground/hospital options for timely and medically appropriate care (particularly in non-urban areas), and the treatment windows. Continue to reassess the patient. If the patient's condition changes then start back with subsection (1)(A) and follow the state stroke protocol outlined in section (1) starting from subsection (1)(A) and on according to the patient's condition. Consider out-of-state transport based on local and regional process for bi-state regions.

3. Group 3—If the patient is out of the lytic/therapeutic and potential therapeutic windows, then transport to a level I, II, III or IV stroke center according to local and regional process. Consider the time for transport, the patient's condition, air/ground/hospital options for timely and medically appropriate care (particularly in non-urban areas), and the treatment windows. Continue to reassess the patient. If the patient's condition changes, then start back with subsection (1)(A) and follow the state stroke protocol outlined in section (1) starting from subsection (1)(A) and on according to the patient's condition. Consider out-of-state transport based on local and regional process for bi-state regions.

(2) All ground and air ambulances shall use the following state transport protocol for suspected STEMI patients except in those circumstances listed in sections (3), (4), and (5) of this rule:

(A) Step 1—Assess for life threatening conditions (serious airway or respiratory compromise or immediate life threatening conditions that cannot be managed in the field).

1. If there are life threatening conditions, then transport the patient to the nearest appropriate facility for stabilization prior to transport to a STEMI center. Consider air/ground/facility options for timely and medically appropriate care (particularly in non-urban areas).

2. If there are no life threatening conditions, then go on to step 2 below in subsection (2)(B) and assess vital signs and perform an electrocardiogram (ECG) if the ground or air ambulance has that

capability. An electrocardiogram and electrocardiogram equipment are recommended;

(B) Step 2—Determine if the patient's vital signs and the electrocardiogram identifies the following:

1. ST-elevation in two (2) contiguous leads or new or presumed new left bundle branch block; and

2. The patient has two (2) of the following three (3) signs of cardiogenic shock:

A. Hypotension where systolic blood pressure is less than ninety millimeters of mercury (90 mmHG);

B. Respiratory distress where respirations are less than ten (10) or greater than twenty-nine (29) per minute; or

C. Tachycardia where the heart rate is greater than one hundred beats per minute (100 BPM);

3. If the patient has an electrocardiogram with ST-elevation in two (2) contiguous leads or new or presumed new left bundle branch block and two (2) of the three (3) signs of cardiogenic shock then transport to a level I STEMI center according to local and regional process. Consider the time for transport, the patient's condition, and the air/ground/hospital options for timely and medically appropriate care (particularly in non-urban areas);

4. If initial transport from the scene to a level I STEMI center is prolonged, then consider transporting to the nearest appropriate facility for stabilization prior to transport to a level I STEMI center;

5. Continue to reassess the patient. If the patient's condition changes, then start back at subsection (2)(A) above and follow the state STEMI protocol outlined in section (2) starting from subsection (2)(A) and on according to the patient's condition;

6. Consider out-of-state transport based on local and regional process for the bi-state region;

7. Communicate electrocardiogram findings to the hospital;

8. If the patient has a positive electrocardiogram but is negative for signs of cardiogenic shock, then go to step 3 in subsection (2)(C) below; and

(C) Step 3—Calculate the estimated time from STEMI identification with the patient to expected percutaneous coronary intervention (PCI) with the patient in order to determine whether the patient is within the percutaneous coronary intervention window. Communicate electrocardiogram findings to the hospital. If no ST-elevation or new or presumed new left bundle branch block then consider a fifteen-(15-) lead electrocardiogram, if available.

1. Group 1—If the patient is within the PCI window or the patient has had chest pain longer than twelve (12) hours or the patient is lytic/thrombolytic ineligible then transport to a level I or level II STEMI center according to local and regional process. Consider the time for transport, the air/ground/hospital options for timely and medically appropriate care (particularly in non-urban areas), the patient's condition, and all treatment windows. Consider the ischemic time and the potential role for lytics (within the lytic window) at an intervening STEMI center in route to the percutaneous coronary intervention center if approaching longer times within the percutaneous coronary intervention window. Continue to reassess the patient. If the patient's condition changes, then start back at subsection (2)(A) and follow the state STEMI protocol outlined in section (2) starting from subsection (2)(A) and on according to the patient's condition. Consider out-of-state transport based on local and regional process for bi-state regions.

2. Group 2—If the patient is outside the percutaneous coronary intervention window and within the lytic/therapeutic window, or outside both windows and the patient has no other known complications, then transport to the STEMI center (level I, II, III, or IV) according to local and regional process. Consider the time for transport, air/ground/hospital options for timely and medically appropriate care (particularly in non-urban areas), the patient's condition, and all the treatment windows. Consider the lytic window and the potential for STEMI center lytic administration when determining the destination(s). Continue to reassess the patient. If the patient's condition changes, then start back at subsection (2)(A) above and follow the

state STEMI protocol outlined in section (2) starting from subsection (2)(A) and on according to the patient's condition. Consider out-of-state transport based on local and regional process for bi-state regions.

(3) When initial transport from the scene of illness or injury to a STEMI or stroke center would be prolonged, the STEMI or stroke patient may be transported to the nearest appropriate facility for stabilization prior to transport to a STEMI or stroke center.

(4) Nothing in this rule shall restrict an individual patient's right to refuse transport to a recommended destination. All ground and air ambulances shall have a written process in place to address patient competency and refusal of transport to the recommended destination.

(5) Ground and air ambulances are not required to use the state transport protocols in this rule when the ambulance is using a community-based or regional plan that has been approved by the department pursuant to section 190.200.3., RSMo, that waives the requirements of this rule. Copies of flow charts of an algorithm depicting the stroke and STEMI state transport protocols are available at the Health Standards and Licensure (HSL) office, online at the department's website [www.health.mo.gov](http://www.health.mo.gov), or may be obtained by mailing a written request to the Missouri Department of Health and Senior Services, HSL, PO Box 570, Jefferson City, MO 65102-0570 or by calling (573) 751-6400.

*AUTHORITY: sections 190.185 and 190.241, RSMo Supp. 2012. Original rule filed Nov. 15, 2012.*

*PUBLIC COST: This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.*

*PRIVATE COST: This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate.*

*NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed rule with Teresa Generous, Director, Department of Health and Senior Services, Division of Regulation and Licensure, PO Box 570, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the Missouri Register. No public hearing is scheduled.*

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION  
Division 2220—State Board of Pharmacy  
Chapter 6—Pharmaceutical Care Standards**

**PROPOSED RULE**

**20 CSR 2220-6.100 Pharmacy Standards for Dispensing Blood-Clotting Products**

*PURPOSE: This rule implements the provisions of section 338.400, RSMo, and establishes pharmacy standards for dispensing blood clotting products.*

(1) Definitions. The following definitions are hereby adopted and applicable to this rule:

(A) "Bleeding disorder," a medical condition characterized by a deficiency or absence of one (1) or more essential blood-clotting components in the human blood, including all forms of hemophilia, acquired hemophilia, von Willebrand's disease, and other bleeding disorders that result in uncontrollable bleeding or abnormal

blood-clotting. As defined by section 338.400, RSMo, "bleeding disorder" does not include a bleeding condition secondary to another medical condition or diagnosis, except for acquired hemophilia;

(B) "Blood-clotting product," a medicine approved for distribution by the federal Food and Drug Administration (FDA) that is used for the treatment and prevention of symptoms associated with bleeding disorders, including, but not limited to, recombinant and plasma derived factor products, von Willebrand factor products, antifibrinolytics, bypass products for patients with inhibitors, prothrombin complex concentrates, and activated prothrombin complex concentrates. Except as otherwise provided by section 338.400, RSMo, a "blood-clotting product" does not include medical products approved solely for the treatment or prevention of side effects of a blood-clotting drug or medication;

(C) "Established patient," For purposes of section 338.400, RSMo, and this rule, an "established patient" shall be defined as a bleeding disorder patient that has been dispensed a legend blood clotting product by the pharmacy on more than three (3) occasions in a single calendar year; and

(D) "Pharmacy," an entity engaged in the practice of pharmacy as defined in section 338.100, RSMo, that provides blood-clotting products and ancillary infusion equipment or supplies to patients with bleeding disorders.

(2) General Requirements. All Missouri licensed pharmacists and pharmacy permit holders shall comply with the following requirements when dispensing blood-clotting factor concentrates:

(A) Prescriptions for blood-clotting factor concentrates shall be dispensed as written or authorized by the prescribing physician, in accordance with state and federal law. No changes or substitutions shall be made unless approved by the prescriber. If the pharmacy has received prescriber authorization to change or substitute the blood-clotting factor concentrate originally prescribed, the patient or the patient's designee shall be notified and counseled regarding the change or substitution prior to dispensing via the preferred contact method identified by the patient or designee pursuant to subsection (2)(E);

(B) If requested by the patient or the patient's designee, the pharmacy shall ship and deliver blood-clotting factor concentrates to the patient or the patient's designee as prescribed within two (2) business days of receiving a prescription or refill request for established patients and three (3) business days for new patients in nonemergency situations. Nonemergency situations shall include, but may not be limited to, routine prophylaxis requests. Appropriate cold chain management and packaging practices must be used to ensure proper drug temperature, stability, integrity, and efficacy are maintained during shipment in accordance with manufacturer requirements;

(C) Patients must be provided with a designated pharmacy contact telephone number for reporting problems with a delivery or product on each dispensing at no cost to the patient;

(D) Unless otherwise authorized by the patient or the patient's designee, the pharmacy shall contact the patient for authorization to dispense prior to shipping a refill of any blood-clotting product to the patient. The date of patient authorization shall be documented in the pharmacy's prescription records;

(E) Barring extenuating circumstances, prescriptions for blood clotting factor concentrates shall be dispensed within plus or minus ten percent (10%) of prescribed assays, or as otherwise authorized or directed by the prescriber; and

(F) Recalls or Withdrawals. Prior to dispensing any blood clotting factor concentrate, the pharmacy shall ask the patient or the patient's designee to designate a preferred contact method for receiving notifications in the event of a recall or withdrawal of the concentrate dispensed or any related ancillary infusion equipment and supplies dispensed by the pharmacy. The preferred contact method shall be documented with the patient information required by 20 CSR 2220-2.190(2).

1. Notice of concentrate or ancillary infusion equipment and

supplies recalls and withdrawals shall be provided to the patient via the patient's preferred contact method within twenty-four (24) hours of receipt of a recall or withdrawal notification from the manufacturer or any state or federal entity that requires or recommends patient notification. The pharmacy shall also notify the prescribing physician within twenty-four (24) hours of such recall or withdrawal and shall obtain a prescription for an alternative product if a new or amended prescription is required to dispense or deemed necessary and appropriate by the prescriber.

2. If attempts to contact the patient via the preferred contact method are unsuccessful, the pharmacy shall mail notification to the patient or the patient's authorized designee within the required twenty-four (24) hours or the next business day.

3. The time, date, and method of notification to the patient and prescriber shall be documented in the pharmacy's records and maintained for two (2) years from the date of recall or withdrawal.

(3) In addition to the provisions of section (2), pharmacies that dispense blood-clotting products to established patients, or that offer or advertise to provide blood-clotting products specifically for bleeding disorder patients, shall comply with the following standards of care:

(A) The pharmacy shall annually notify the board in writing of the pharmacy's intent to provide legend blood-clotting products for bleeding disorder patients. Notification shall be made on or before January 31 of each calendar year in a manner and form approved by the board;

(B) The pharmacy shall identify in advance, or make arrangements with, a supplier or suppliers capable of providing all brands, assays, and vial sizes of blood-clotting products approved by the federal FDA, including products manufactured from human plasma and those manufactured from recombinant technology techniques. A list of all designated or identified suppliers shall be maintained at the pharmacy and made available during inspection. This requirement shall not be construed to require a pharmacy to purchase products prior to receiving a valid prescription order;

(C) A pharmacist shall be available twenty-four (24) hours a day, seven (7) days a week, every day of the year, either on-site or on call, to fill prescriptions for blood clotting products, within the time frames designated by section 338.400, RSMo, and the provisions of this rule;

(D) Pharmacists engaged in dispensing or filling blood-clotting factor concentrates or who provide patient counseling regarding blood-clotting factor concentrates to bleeding disorder patients shall have sufficient knowledge, experience, and training to perform the duties assigned. To ensure continued competency, pharmacists engaged in counseling bleeding disorder patients shall complete four (4) continuing education hours (0.40 CEU) related to blood-clotting factor concentrates, infusion treatment or therapy, or blood-clotting disorders or diseases each biennial renewal period. The continuing education required by this rule may be used to satisfy the pharmacist's continuing education requirements. Proof of compliance with this section shall be maintained at the pharmacy for a minimum of four (4) calendar years and shall be made available during inspection or at the request of the board;

(E) If requested by the patient or the patient's designee, the pharmacy shall provide for the shipment and delivery of blood-clotting products to the patient or the patient's designee as prescribed within two (2) business days of receiving a prescription or refill request for established patients and three (3) business days for new patients in nonemergency situations;

(F) Established patients shall be provided access to blood-clotting products within twelve (12) hours of notification from a physician of the patient's emergent need for a blood-clotting product. For purposes of this section, determination of an emergent need shall be within the professional medical judgment of the physician. Emergent need requests shall be documented in the pharmacy's prescription records;

(G) The pharmacy shall provide or have available for purchase containers for the disposal of hazardous waste, including, but not limited to, sharp or equivalent biohazard waste containers;

(H) At a minimum, the pharmacy shall provide or have available for purchase ancillary equipment and supplies required to infuse a blood-clotting therapy product into a human vein, including, syringes, needles, sterile gauze, field pads, gloves, alcohol swabs, numbing creams, tourniquets, medical tape, and cold compression packs. If supplies are depleted, the pharmacy shall restock the required ancillary equipment and supplies in a reasonable amount of time which shall not exceed seven (7) calendar days;

(I) The pharmacy shall have contact information available for a nurse or nursing service or agency with experience in providing infusion related nursing services or nursing services for bleeding disorder patients if such services are not provided by the pharmacy;

(J) If requested by the patient or the patient's authorized designee, the pharmacist shall explain any known insurance copayments, deductibles, coinsurance payments, or lifetime maximum insurance payment limits. For purposes of complying with this section, the pharmacy may rely on information supplied by the patient's insurer; and

(K) The pharmacy shall register with the National Patient Notification System, or its successor, to receive recall notification for all products included in the National Patient Notification System. The pharmacy shall maintain current and accurate contact information with the National Patient Notification System.

(4) Pharmacies that provide legend blood-clotting products to treat or prevent symptoms of established bleeding disorder patients, or that offer or advertise to provide blood-clotting products specifically for bleeding disorder patients, shall develop and follow written policies and procedures to ensure compliance with section 338.440, RSMo, and the provisions of this rule. The pharmacy shall review the policies and procedures on an annual basis and document such review. At a minimum, the pharmacy's written policies and procedures must include procedures for:

(A) Processing prescriptions for blood-clotting products by pharmacy staff to ensure the timely handling and dispensing of blood-clotting products;

(B) Processing partial fill requests by patients to reduce or eliminate excessive dispensing;

(C) Providing and documenting recall notifications in accordance with this rule;

(D) Transferring, dispensing, refilling, or delivering blood-clotting factor concentrates to established patients in the event of an emergency or disaster;

(E) Notifying patients prior to terminating business or terminating the dispensing of any blood-clotting factor concentrate or prior to a known or an anticipated termination of pharmacy services for a bleeding disorder patient. Notification shall be provided in writing and, when reasonably possible, shall be provided a minimum of seven (7) days prior to any such termination;

(F) Shipping or providing blood-clotting products to the patient within the time frames required herein;

(G) Receiving, processing, and dispensing prescription or dispensing requests for a blood-clotting product to bleeding disorder patients, including procedures for handling and processing physician request indicating a patient's emergent need for a blood-clotting product;

(H) Ensuring appropriate cold chain management and packaging practices are used to ensure proper drug temperature, stability, integrity, and efficacy are maintained during shipment in accordance with manufacturer requirements; and

(I) Handling and processing preauthorization notifications and requests and communicating preauthorization requirements to the patient and applicable prescriber.

(5) This rule shall not be construed to require dispensing without

appropriate payment or payment arrangements. If the pharmacy is waiting for authorization, certification, or other action from a third-party payer prior to dispensing, the pharmacy shall notify the patient that the prescription is available for dispensing and explain any alternative payment options. Notification shall be provided as soon as reasonably practicable. At a minimum, however, notification shall be provided to the patient prior to the expiration of the shipping and delivery time frames required by subsection (2)(E), (3)(B), or (3)(F) of this rule.

*AUTHORITY: section 338.280, RSMo 2000, and sections 338.140 and 338.400, RSMo Supp. 2012. Original rule filed Nov. 13, 2012.*

*PUBLIC COST: This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.*

*PRIVATE COST: This proposed rule will cost private entities approximately ten thousand two hundred thirty-two dollars (\$10,232) during the first year of implementation of the rule and twenty-six thousand seven hundred twenty-three dollars and twenty-five cents (\$26,723.25) recurring annually after the first year of implementation and annually thereafter for the life of the rule. It is anticipated that the costs will recur for the life of the rule, may vary with inflation, and are expected to increase at the rate projected by the Legislative Oversight Committee.*

*NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed rule with the Missouri State Board of Pharmacy, PO Box 625, 3605 Missouri Boulevard, Jefferson City, MO 65102, by facsimile at (573) 526-3464, or via email at [pharmacy@pr.mo.gov](mailto:pharmacy@pr.mo.gov). To be considered, comments must be received within thirty (30) days after publication of this notice in the **Missouri Register**. No public hearing is scheduled.*

**PRIVATE ENTITY FISCAL NOTE**

**I. RULE NUMBER**

**Title 20 -Department of Insurance, Financial Institutions and Professional Registration**

**Division 2220 - State Board of Pharmacy**

**Chapter 6 - Pharmaceutical Care Standards**

**Proposed Rule 20 CSR 2220-6.100 Pharmacy Standards for Dispensing Blood Clotting Products**

Prepared November 7, 2012 by the Division of Professional Registration

**II. SUMMARY OF FISCAL IMPACT**

Estimate of the number of entities by class which would likely be affected by the adoption of the rule:	Classification by types of the business entities which would likely be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
25	Pharmacies dispensing blood clotting factors to bleeding disorder patients	\$10,232.00 During First Year of Implementation of the Rule
25	Pharmacies dispensing blood clotting factors to bleeding disorder patients	\$26,723.25 Recurring Annually After the First Year of Implementation and Annually Thereafter for the Life of the Rule

**III. WORKSHEET**

**ESTIMATE OF LICENSEE COSTS**

**During First Year of Implementation of the Rule**

Estimated # of Participating Pharmacies	Calculation of Estimates	TOTAL COSTS
25	Establishing written policies and procedures (\$ 51.16 pharmacist hourly wage x 8 hours x 25 pharmacies)	\$10,232.00
		<b>\$10,232.00</b>



**Recurring Annually After the First Year of Implementation and Annually Thereafter for the Life of the Rule**

Estimated # of Participating Pharmacies	Calculation of Estimates	TOTAL COSTS
25	Toll free phone number (\$50 per month x 12 months)	\$15,000.00
25	Annual board notification of intent to provide services (mailing costs @ \$.65)	\$16.25
25	Notification of prescriber authorized medication changes/substitues (\$ .65 mailing costs x 820 bleeding disorder patients x 4 notifications per year)	\$2,132.00
25	Refill notification for automatic shipment (\$ .65 mailing costs x 820 bleeding disorder patients x 4 notifications per year)	\$2,132.00
25	Patient notification of product recalls (\$ .65 mailing costs x 820 bleeding disorder patients x 2 notifications per year)	\$1,066.00
3	Notification of termination of business (\$ .65 mailing costs x 100 patients x 3 pharmacies)	\$195.00
25	Notification of third party payer delays (\$ .65 mailing costs x 410 patients x 4 notifications)	\$1,066.00
25	Annual review of policies and procedures (\$ 51.16 pharmacist hourly wage x 4 hours x 25 pharmacies)	\$5,116.00
		<b>\$26,723.25</b>

**IV. ASSUMPTION**General Assumptions:

1. The board anticipates the recurring costs will continue annually for the life of the rule. Estimated costs may vary with inflation.
2. Based on information from the Midwest Hemophilia Association and pharmacy representatives specializing in dispensing bleeding clotting products, the board estimates fewer than 25 Missouri pharmacies will be engaged in dispensing products identified in the rule. The board was informed its estimation may be higher than the number of pharmacies currently dispensing blood clotting products for bleeding disorder patients. However, the estimate has been used to ensure full compliance with Chapter 536, RSMo and to account for future fluctuations.
3. Based on information from the Midwest Hemophilia Association, approximately 820 bleeding disorder patients currently exist in Missouri. As a result, an estimated statewide total of 820 patients was used to estimate costs. The board understands many of the current 820 patients receive blood clotting products from non-pharmacy sources which could significantly reduce the number of patients referenced in the rule. However, 820 patients were estimated to ensure full compliance with Chapter 536, RSMo, and to account for population growth.

4. Based on internet research, the board estimates a monthly cost of approximately \$50 per month to maintain a basic commercial toll-free telephone number. Significantly, several pharmacies currently maintain toll-free numbers and will not experience additional costs. However, the costs to all estimated pharmacies have been included to ensure compliance with Chapter 536, RSMo.
5. Registration with the National Patient Notification system is free and can be completed electronically. Accordingly, no registration costs have been estimated.
6. The rule requires documentation of dispensing and notification activities in the pharmacy's prescription record. Pharmacies are currently required to maintain a prescription record system and to document dispensing activities by 20 CSR 2220-2.010 and 20 CSR 2220-2.018. The proposed rule would allow use of the prescription record system currently mandated. Accordingly, no additional costs have been estimated for maintaining/documenting required records or activities.
7. The proposed rule requires affected pharmacies to adopt policies and procedures. An estimated total of 8 hours would be required for a pharmacist to compile the required documents. The United States Bureau of Labor Statistics estimates the median annual pharmacist wage/salary to be approximately \$ 106,410 in the *Occupational Outlook Handbook, 2010-2011 Edition*. Based on the estimated annual salary, an hourly pharmacist wage of \$ 51.16 was utilized to estimate costs. Notably, model policies and procedures may be available from industry organizations.
8. A pharmacist would spend an estimated maximum of 4-hours each year conducting the proposed annual policy and procedure review. Costs were estimated utilizing the previously mentioned estimated pharmacist hourly wage (\$51.16 per hour x 4-hours annually x 25 pharmacies).
9. The board anticipates establishing a free electronic process for providing all required board notifications. However, estimated mailing costs have been included herein to ensure compliance with Chapter 536.

#### Notifications

10. Many of the notifications required by the proposed rule may be provided electronically or by phone, if authorized by the patient. The potential number of patients requesting electronic or phone notification is unknown. As a result, mailing costs have been included herein to ensure compliance with Chapter 536. Mailing costs include costs of postage, envelopes and letterhead.
11. Based on information from parent and pharmacy representatives, the board understands many insurance plans authorize a 90-day supply of medications/supplies referenced by the proposed rule. Accordingly, the board estimates notification of medication changes/substitutes, automatic shipments and third party payer delays will only be required approximately 4 times per year per patient.
12. The number of potential third party payer delays is unknown. The board estimates approximately half of the affected patients may experience a payment delay at each estimated 90-day dispensing cycle that would require notification by the pharmacy.
13. Based on historical data from the National Patient Notification System, less than 2 recalls of the products/items designated in the rule are issued each year that require patient notification. This number has remained historically consistent. Accordingly, recall notification costs were estimated based on an estimated 2 applicable recalls per year. *Note: In the years that exceeded 2 recalls, the recalls were generally issued by the same manufacturer on the same date for similar products. Notification of these multiple recalls can be included in a single notification.*
14. The number of pharmacies required to notify patients of a termination of business or discontinuation of services is unknown. According to the board's FY12 licensing statistics, less than 10% of total licensed pharmacies notified the board of a business closing. The board estimates a similar total would be applicable to pharmacies subject to the proposed rule. Accordingly, the board estimates approximately 3 pharmacies would be required to provide patient notification of a closing or discontinuation of services.

**THIS PAGE INTENTIONALLY  
LEFT BLANK**

**THIS ISSUE CONTAINS  
THREE PARTS**

**END OF PART II**

Volume 37, Number 24  
Pages 2295–2346  
December 17, 2012  
Part III

SALUS POPULI SUPREMA LEX ESTO

*“The welfare of the people shall be the supreme law.”*



ROBIN CARNAHAN  
SECRETARY OF STATE

# MISSOURI REGISTER

The *Missouri Register* is an official publication of the state of Missouri, under the authority granted to the secretary of state by sections 536.015, RSMo Supp. 2012 and 536.033, RSMo 2000. Reproduction of rules is allowed; however, no reproduction shall bear the name *Missouri Register* or "official" without the express permission of the secretary of state.

The *Missouri Register* is published semi-monthly by

**SECRETARY OF STATE**

**ROBIN CARNAHAN**

Administrative Rules Division

James C. Kirkpatrick State Information Center  
600 W. Main  
Jefferson City, MO 65101  
(573) 751-4015

**DIRECTOR**

WAYLENE W. HILES

•

**EDITORS**

CURTIS W. TREAT

SALLY L. REID

**ASSOCIATE EDITOR**

DELANE JACQUIN

•

**PUBLICATION TECHNICIAN**

JACQUELINE D. WHITE

•

**SPECIALIST**

MICHAEL C. RISBERG

•

**ADMINISTRATIVE ASSISTANT**

ALISHA DUDENHOEFFER

ISSN 0149-2942, USPS 320-630; periodical postage paid at Jefferson City, MO  
Subscription fee: \$56.00 per year

POSTMASTER: Send change of address notices and undelivered copies to:

**MISSOURI REGISTER**

Office of the Secretary of State

Administrative Rules Division

PO Box 1767

Jefferson City, MO 65102

The *Missouri Register* and *Code of State Regulations* (CSR) are now available on the Internet. The Register address is <http://www.sos.mo.gov/adrules/moreg/moreg.asp> and the CSR is <http://www.sos.mo.gov/adrules/csr/csr.asp>. These websites contain rulemakings and regulations as they appear in the Registers and CSR. These websites do not contain the official copies of the Registers and CSR. The official copies remain the paper copies published by the Office of the Secretary of State pursuant to sections 536.015 and 536.031, RSMo Supp. 2012. While every attempt has been made to ensure accuracy and reliability, the Registers and CSR are presented, to the greatest extent practicable as they appear in the official publications. The Administrative Rules Division may be contacted by email at [rules@sos.mo.gov](mailto:rules@sos.mo.gov).

The secretary of state's office makes every effort to provide program accessibility to all citizens without regard to disability. If you desire this publication in alternate form because of a disability, please contact the Division of Administrative Rules, PO Box 1767, Jefferson City, MO 65102, (573) 751-4015. Hearing impaired citizens should contact the director through Missouri relay, (800) 735-2966.



## IN THIS ISSUE:

### PART I

#### PROPOSED RULES

##### Department of Health and Senior Services

Division of Regulation and Licensure . . . . .1889

### PART II

##### Department of Health and Senior Services

Division of Regulation and Licensure . . . . .2097

##### Department of Insurance, Financial Institutions and Professional Registration

State Board of Pharmacy . . . . .2286

### PART III

##### Department of Insurance, Financial Institutions and Professional Registration

Real Estate Appraisers . . . . .2299

#### ORDERS OF RULEMAKING

##### Department of Agriculture

State Milk Board . . . . .2320

Weights and Measures . . . . .2322

##### Department of Social Services

MO HealthNet Division . . . . .2324

##### Department of Insurance, Financial Institutions and Professional Registration

Missouri State Board of Accountancy . . . . .2325

Missouri Board for Architects, Professional Engineers, Professional Land Surveyors, and Landscape Architects . .2325

Division of Professional Registration . . . . .2326

Missouri Real Estate Commission . . . . .2326

**CONTRACTOR DEBARMENT LIST** . . . . .2328

**DISSOLUTIONS** . . . . .2330

#### SOURCE GUIDES

**RULE CHANGES SINCE UPDATE** . . . . .2332

**EMERGENCY RULES IN EFFECT** . . . . .2337

**EXECUTIVE ORDERS** . . . . .2339

**REGISTER INDEX** . . . . .2341

Register Filing Deadlines	Register Publication Date	Code Publication Date	Code Effective Date
August 1, 2012	September 4, 2012	September 30, 2012	October 30, 2012
August 15, 2012	September 17, 2012	September 30, 2012	October 30, 2012
September 4, 2012	October 1, 2012	October 31, 2012	November 30, 2012
September 17, 2012	October 15, 2012	October 31, 2012	November 30, 2012
October 1, 2012	November 1, 2012	November 30, 2012	December 30, 2012
October 15, 2012	November 15, 2012	November 30, 2012	December 30, 2012
November 1, 2012	December 3, 2012	December 31, 2012	January 30, 2013
November 15, 2012	December 17, 2012	December 31, 2012	January 30, 2013
December 3, 2012	January 2, 2013	January 29, 2013	February 28, 2013
December 17, 2012	January 15, 2013	January 29, 2013	February 28, 2013
January 2, 2013	February 1, 2013	February 28, 2013	March 30, 2013
January 15, 2013	February 15, 2013	February 28, 2013	March 30, 2013
February 1, 2013	March 1, 2013	March 31, 2013	April 30, 2013
February 15, 2013	March 15, 2013	March 31, 2013	April 30, 2013
March 1, 2013	April 1, 2013	April 30, 2013	May 30, 2013
March 15, 2013	April 15, 2013	April 30, 2013	May 30, 2013
April 1, 2013	May 1, 2013	May 31, 2013	June 30, 2013
April 15, 2013	May 15, 2013	May 31, 2013	June 30, 2013
May 1, 2013	June 3, 2013	June 30, 2013	July 30, 2013
May 15, 2013	June 17, 2013	June 30, 2013	July 30, 2013

Documents will be accepted for filing on all regular workdays from 8:00 a.m. until 5:00 p.m. We encourage early filings to facilitate the timely publication of the *Missouri Register*. Orders of Rulemaking appearing in the *Missouri Register* will be published in the *Code of State Regulations* and become effective as listed in the chart above. Advance notice of large volume filings will facilitate their timely publication. We reserve the right to change the schedule due to special circumstances. Please check the latest publication to verify that no changes have been made in this schedule. To review the entire year's schedule, please check out the website at <http://www.sos.mo.gov/adrules/pubsched.asp>

# Missouri Participating Libraries

The *Missouri Register* and the *Code of State Regulations*, as required by the Missouri Documents Law (section 181.100, RSMo Supp. 2012), are available in the listed participating libraries, as selected by the Missouri State Library:

Jefferson County Library PO Box 1486, 3021 High Ridge High Ridge, MO 63049-1486 (314) 677-8689	Learning Resources Center Mineral Area College PO Box 1000 Park Hills, MO 63601-1000 (573) 431-4593	Hearnes Learning Resources Ctr. Missouri Western State University 4525 Downs Drive St. Joseph, MO 64507-2294 (816) 271-5802	Library Missouri University of Science and Technology 1870 Miner Circle Rolla, MO 65409-0060 (573) 341-4007
Jefferson College Library 1000 Viking Drive Hillsboro, MO 63050-2441 (314) 789-3951 ext. 160	Cape Girardeau Public Library 711 N. Clark Cape Girardeau, MO 63701-4400 (573) 334-5279	Library North Central Missouri College PO Box 111, 1301 Main Street Trenton, MO 64683-0107 (660) 359-3948 ext. 325	Lebanon-Laclede County Library 915 S. Jefferson Ave. Lebanon, MO 65536-3017 (417) 532-2148
St. Louis Public Library 1301 Olive St. St. Louis, MO 63103-2389 (314) 539-0376	Kent Library Southeast Missouri State University One University Plaza Cape Girardeau, MO 63701-4799 (573) 651-2757	Spiva Library Missouri Southern State University 3950 East Newman Road Joplin, MO 64801-1595 (417) 625-9342	University Library Southwest Baptist University 1600 University Ave. Bolivar, MO 65613-2597 (417) 328-1631
St. Louis University Law Library 3700 Lindell Blvd. St. Louis, MO 63108-3478 (314) 977-2742	Riverside Regional Library PO Box 389, 1997 E. Jackson Blvd. Jackson, MO 63755-0389 (573) 243-8141	Missouri State Library 600 West Main, PO Box 387 Jefferson City, MO 65102-0387 (573) 751-3615	Barry-Lawrence Regional Library 213 6th St. Monett, MO 65708-2147 (417) 235-6646
Eden/Webster Library Eden Theological Seminary/ Webster University 475 East Lockwood Ave. St. Louis, MO 63119-3192 (314) 961-2660 ext. 7812	Rutland Library Three Rivers Community College 2080 Three Rivers Blvd. Poplar Bluff, MO 63901-2393 (573) 840-9656	Missouri State Archives 600 West Main, PO Box 778 Jefferson City, MO 65102-0778 (573) 526-6711	Lyons Memorial Library College of the Ozarks General Delivery Point Lookout, MO 65726-9999 (417) 334-6411 ext. 3551
Thomas Jefferson Library University of Missouri-St. Louis 8001 Natural Bridge Road St. Louis, MO 63121-4499 (314) 516-5084	James C. Kirkpatrick Library University of Central Missouri 142 Edwards Library Warrensburg, MO 64093-5020 (660) 543-4149	Elmer Ellis Library University of Missouri-Columbia 106 B Ellis Library Columbia, MO 65211-5149 (573) 882-0748	Garnett Library Missouri State University—West Plains 304 Cleveland West Plains, MO 65775-3414 (417) 255-7945
Washington University Law Library Washington University Campus Box 1171, Mudd Bldg., One Brookings Dr. St. Louis, MO 63130-4899 (314) 935-6443	Kansas City Public Library 14 West 10th Street Kansas City, MO 64105 (816) 701-3546	Library State Historical Society of Missouri 1020 Lowry St. Columbia, MO 65211-7298 (573) 882-9369	Springfield-Greene County Library 4653 S. Campbell Springfield, MO 65801-0760 (417) 874-8110
St. Louis County Library 1640 S. Lindbergh Blvd. St. Louis, MO 63131-3598 (314) 994-3300 ext. 247	Law Library University of Missouri-Kansas City 5100 Rockhill Road Kansas City, MO 64110-2499 (816) 235-2438	Daniel Boone Regional Library PO Box 1267, 100 West Broadway Columbia, MO 65205-1267 (573) 443-3161 ext. 359	Meyer Library Missouri State University PO Box 175, 901 S. National Springfield, MO 65804-0095 (417) 836-4533
Library Maryville University 13550 Conway Road St. Louis, MO 63141-7232 (314) 529-9494	Miller Nichols Library University of Missouri-Kansas City 5100 Rockhill Road Kansas City, MO 64110-2499 (816) 235-2438	School of Law University of Missouri-Columbia 224 Hulston Hall Columbia, MO 65211-0001 (573) 882-1125	
Pickler Memorial Library Truman State University 100 E. Normal Kirksville, MO 63501-4221 (660) 785-7416	B.D. Owens Library Northwest Missouri State University 800 University Drive Maryville, MO 64468-6001 (660) 562-1841	Smiley Memorial Library Central Methodist University 411 Central Methodist Square Fayette, MO 65248-1198 (660) 248-6279	
	St. Joseph Public Library 927 Felix Street St. Joseph, MO 64501-2799 (816) 232-8151		

## HOW TO CITE RULES AND RSMo

**RULES**—Cite material in the *Missouri Register* by volume and page number, for example, Vol. 28, *Missouri Register*, page 27. The approved short form of citation is 28 MoReg 27.

The rules are codified in the *Code of State Regulations* in this system—

Title	Code of State Regulations	Division	Chapter	Rule
1	CSR	10-	1.	010
Department		Agency, Division	General area regulated	Specific area regulated

They are properly cited by using the full citation , i.e., 1 CSR 10-1.010.

Each department of state government is assigned a title. Each agency or division within the department is assigned a division number. The agency then groups its rules into general subject matter areas called chapters and specific areas called rules. Within a rule, the first breakdown is called a section and is designated as (1). Subsection is (A) with further breakdown into paragraph 1., subparagraph A., part (I), subpart (a), item I. and subitem a.

**RSMo**—The most recent version of the statute containing the section number and the date.



**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION  
Division 2245—Real Estate Appraisers  
Chapter 1—Organization and Description of  
Commission**

**PROPOSED AMENDMENT**

**20 CSR 2245-1.010 General Organization.** The commission is proposing to amend sections (1), (3), and (7).

*PURPOSE: This amendment adds reference to appraisal management companies to implement the provisions of HB 1103(2012) which became effective August 28, 2012.*

(1) The Missouri Real Estate Appraisers Commission, an agency of the Division of Professional Registration of the Department of Insurance, Financial Institutions and Professional Registration, is responsible for the examination, licensing, and regulation of persons who engage in real estate appraisal business **and appraisal management companies** as set out in sections 339.500–339.~~547~~**549**, RSMo.

(3) The commission may do all things necessary to carry into effect the provisions of sections 339.500–339.~~547~~**549**, RSMo, and from time-to-time may promulgate necessary regulations compatible with the provisions of those sections.

(7) The commission shall transmit to the Appraisal Subcommittee, at least monthly, a roster listing individuals who have received a state certificate or license and are eligible to perform appraisals in federally-related transactions **and a listing of licensed appraisal management companies**. The commission shall transmit to the Federal Financial Institutions Examination Council (FFIEC) a monthly registry fee as determined by the Appraisal Subcommittee for those individuals **and licensed appraisal management companies** who are listed on the roster provided to the Appraisal Subcommittee. The registry fee is included in the fees in section 20 CSR 2245-5.020(2) **and (3)**.

*AUTHORITY: sections 339.507 and 339.509, RSMo Supp. [2010] 2012, and section [339.509,] 339.544, RSMo 2000. This rule originally filed as 4 CSR 245-1.010. Emergency rule filed Dec. 6, 1990, effective Dec. 16, 1990, expired April 14, 1991. Original rule filed Jan. 3, 1991, effective April 29, 1991. For intervening history, please consult the Code of State Regulations. Amended: Filed Nov. 13, 2012.*

*PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.*

*PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate.*

*NOTICE SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with the Missouri Real Estate Appraisers Commission at PO Box 1335, Jefferson City, MO 65102-1335, by email to [reacom@pr.mo.gov](mailto:reacom@pr.mo.gov), or by facsimile to (573) 526-3489. To be considered, comments must be received within thirty (30) days after publication of this notice in the Missouri Register. No public hearing is scheduled.*

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION  
Division 2245—Real Estate Appraisers  
Chapter 2—General Rules**

**PROPOSED AMENDMENT**

**20 CSR 2245-2.010 Definitions.** The commission is proposing to amend section (1).

*PURPOSE: This amendment adds reference to appraisal management companies to implement the provisions of HB 1103(2012) which became effective August 28, 2012.*

(1) Words defined in sections 339.500–339.~~547~~**549**, RSMo, shall have the same meaning when used in these rules and, in addition, unless the context plainly requires a different meaning—Licensee, for the purposes of this Act, means an individual person who has been certified as a state-certified general real estate appraiser, a state-certified residential real estate appraiser, *[or licensed as]* a state-licensed real estate appraiser, **or a licensed appraisal management company**.

*AUTHORITY: sections 339.503 and 339.509, [RSMo (Cum. Supp. 1990)] RSMo Supp. 2012, and section 339.544, RSMo 2000. This rule originally filed as 4 CSR 245-2.010. Emergency rule filed Dec. 6, 1990, effective Dec. 16, 1990, expired April 14, 1991. Emergency rule filed April 4, 1991, effective April 14, 1991, expired Aug. 11, 1991. Original rule filed Jan. 3, 1991, effective April 29, 1991. Amended: Filed Aug. 14, 1991, effective Jan. 13, 1992. Moved to 20 CSR 2245-2.010, effective Aug. 28, 2006. Amended: Filed Nov. 13, 2012.*

*PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.*

*PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate.*

*NOTICE SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with the Missouri Real Estate Appraisers Commission at PO Box 1335, Jefferson City, MO 65102-1335, by email to [reacom@pr.mo.gov](mailto:reacom@pr.mo.gov), or by facsimile to (573) 526-3489. To be considered, comments must be received within thirty (30) days after publication of this notice in the Missouri Register. No public hearing is scheduled.*

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION  
Division 2245—Real Estate Appraisers  
Chapter 3—Applications for Certification and Licensure**

**PROPOSED RULE**

**20 CSR 2245-3.001 Implementation of 2015 AQB Criteria**

*PURPOSE: This rule defines the licensure/certification requirements to implement 2015 Appraiser Qualifications Board (AQB) Criteria which go into effect January 1, 2015.*

(1) Applicants who successfully complete all requirements for licensure/certification and are approved by the commission on or before December 31, 2014, shall be bound by requirements found in 20

CSR 2245-3.005, 20 CSR 2245-3.010, 20 CSR 2245-3.020, and 20 CSR 2245-6.015.

(2) Applicants who have not successfully completed all requirements for licensure/certification and have not been approved by the commission on or before December 31, 2014, shall be bound by the requirements found in 20 CSR 2245-3.005, 20 CSR 2245-3.010, 20 CSR 2245-3.020, and 20 CSR 2245-6.016.

*AUTHORITY: sections 339.509, 339.511, and 339.515, RSMo Supp. 2012, and section 339.544, RSMo 2000. Original rule filed Nov. 13, 2012.*

*PUBLIC COST: This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.*

*PRIVATE COST: This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate.*

*NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed rule with the Real Estate Appraisers Commission, PO Box 1335, Jefferson City, MO 65102, by facsimile at (573) 526-3489, or via email at reacom@pr.mo.gov. To be considered, comments must be received within thirty (30) days after publication of this notice in the Missouri Register. No public hearing is scheduled.*

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION  
Division 2245—Real Estate Appraisers  
Chapter 3—Applications for Certification and Licensure**

**PROPOSED AMENDMENT**

**20 CSR 2245-3.005 Trainee Real Estate Appraiser Registration.** The commission is amending sections (1) and (6) and subsection (7)(C), adding a new section (4) and subsection (6)(F), and renumbering as needed.

*PURPOSE: This amendment adds educational requirements for trainees and outlines the assignment log requirement for individuals seeking credit for mass appraisal experience.*

(1) For purposes of this rule, “registrant” shall mean a “trainee real estate appraiser” and “registration” shall mean the registration with the commission of a “trainee real estate appraiser” **who is at least eighteen (18) years of age and has a high school diploma or the equivalent at the time of registration.**

**(4) On or after July 1, 2013, trainee applicants in addition to the requirements outlined in section (3) of this rule will also be required to submit—**

**(A) Proof that supervisor and trainee have successfully completed an approved course related to the requirements and responsibilities of the supervisory appraiser and expectations for trainee appraisers;**

**(B) Proof of successfully completing the following approved courses taken within the five- (5-) year period prior to date of application submission:**

- |   |          |
|---|----------|
| 1. National Uniform Standards of Professional Appraisal Practice (USPAP) Course | 15 hours |
| 2. Basic Appraisal Principles   | 30 hours |
| 3. Basic Appraisal Procedures   | 30 hours |
| <b>Total 75 Hours; and</b>  |          |

**(C) Proof of submission of fingerprints to the Missouri State Highway Patrol’s approved vendor for both a Missouri State Highway Patrol and Federal Bureau of Investigation fingerprint background check. Any fees due for fingerprint background checks shall be paid by the applicant directly to the Missouri State Highway Patrol or its approved vendor;**

**(D) All applications shall include the appropriate fees as established pursuant to 20 CSR 2245-5.020 and physical work and home addresses for the applicant. The commission will not consider an application which is incomplete or with which the correct fees have not been submitted;**

**(E) Licenses or certificates issued to trainees will be valid for a period of four (4) years from the date of issuance. The holder of a license or certificate as a trainee may request an extension in writing and for just cause at least thirty (30) days prior to the expiration date. The commission may grant one (1) extension for one (1) additional year; and**

**(F) The commission may refuse to issue a license or certificate for any one (1) or any combination of causes set forth in section 339.532, RSMo.**

**[(4)](5) No real estate appraisal experience is required as a prerequisite for registration.**

**[(5)](6) Training.**

(A) The registrant shall be subject to direct supervision by a Missouri certified appraiser in good standing with the commission for the prior ~~two (2)~~ **three (3)** years. If the trainee is currently licensed or certified, supervision shall only be required if the trainee is completing experience outside their current scope of practice.

(B) The supervising appraiser(s) shall be responsible for the training, guidance, and direct supervision of the registrant by:—

1. Accepting responsibility for the appraisal report by signing and certifying that the report complies with the *Uniform Standards of Professional Appraisal Practice* (USPAP), ~~[2010]~~ **2012** Edition. The USPAP, ~~[2010]~~ **2012** Edition, is incorporated herein by reference and can be obtained from The Appraisal Foundation, 1155 15th Street NW, Suite 1111, Washington, DC 20005, by calling (202) 347-7722, or at [www.appraisalfoundation.org](http://www.appraisalfoundation.org). This rule does not incorporate any subsequent amendments or additions to the USPAP;

2. Reviewing and signing the appraisal report(s) for which the registrant has provided appraisal services; and

3. Personally inspecting each appraised property with the registrant until the supervising appraiser determines the registrant trainee is competent, in accordance with the competency rule of USPAP. If applying for a residential certification, the supervising appraiser shall personally inspect fifty (50) properties with the registrant, unless otherwise waived by the commission for good cause. If applying for certified general, the supervising appraiser shall personally inspect twenty (20) nonresidential properties with the registrant, unless otherwise waived by the commission for good cause.

(C) The registrant is permitted to have more than one (1) supervising appraiser, but a supervising appraiser may not supervise more than three (3) registrants at one (1) time. The supervisor shall not be employed by the trainee.

(D) The registrant and a supervising appraiser shall notify the commission of a newly created supervisory relationship and submit an affidavit from the supervising appraiser acknowledging the supervisory relationship prior to the registrant performing appraisal services under the supervising appraiser. A registrant shall not receive credit for appraisal experience under a certified appraiser unless the registrant has first notified the commission of the certified appraiser’s name and license number. Within ten (10) days of the termination of a supervisory relationship, the registrant and the supervising appraiser shall notify the commission that the supervisory relationship has been terminated.

(E) The registrant and each supervising appraiser shall maintain an appraisal log. This appraisal log may be maintained jointly, but each

shall be individually responsible to assure the completion and availability of the appraisal log regardless of the agreement or practice of the registrant and the supervising appraiser regarding its maintenance. Separate appraisal logs shall be maintained for each supervising appraiser. The registrant and the supervising appraiser shall provide a copy of the appraisal log to the commission upon request. At a minimum, the appraisal log shall include the information required by 20 CSR 2245-2.050 and the following:

1. Description of work performed by the trainee and scope of the review and supervision of the supervising appraiser;
2. Number of actual work hours by the trainee on the assignment; and
3. The name and state certification number of the supervising appraiser.

**(F) Registrants who are submitting experience hours associated with mass appraising shall submit a log that shall include at a minimum the following:**

1. Date(s); month and year;
2. Subject or project (location, description, or address);
3. Appraisal task(s);
4. Property type(s);
5. Client;
6. Number of properties;
7. Actual number of hours to complete the assignment;
8. Appraiser(s); and
9. Description of work performed by trainee and scope of supervision of the supervising appraiser.

**[(F)](G)** The Missouri certification of the supervising appraiser shall be in good standing and not subject to revocation, *[or]* suspension, **or probation** within the last *[two (2)] three (3) years*. *["Subject to revocation or suspension within the last [two (2)] three (3) years"]* shall mean that any term of revocation or suspension shall be terminated more than *[two (2)] three (3) years* prior to a licensee serving as supervising appraiser. Anyone subject to probation cannot supervise trainees during the probationary period, unless otherwise ordered by the commission.

**[(G)](H)** A certified appraiser may not serve as the supervising appraiser for an individual trainee for more than five (5) years, unless otherwise approved by the commission for good cause. The "trainee real estate appraiser" registration is not intended as a long-term method of performing appraisal services in the absence of progress toward licensure or certification as an appraiser. A supervising appraiser shall not serve as supervising appraiser for any trainee if the supervisor has knowledge that the trainee does not intend to progress toward licensure or certification or with the intent to evade the appraiser licensing or certification requirements of Chapter 333, RSMo.

**[(6)](7)** A person may register as a trainee under a supervising appraiser certified in another state if:—

(A) The supervising appraiser is certified in another state that has requirements that are substantially similar to the requirements in Missouri for certification as a state-certified general or state-certified residential real estate appraiser;

(B) The supervising appraiser's certification from the other state authorizes the supervisor, at a minimum, to perform the same scope of appraisal services that either a Missouri-certified general or certified residential appraiser is authorized to perform.;

(C) The supervising appraiser's certification from the other state is active and has been in good standing and not subject to discipline for the prior *[two (2) years] three (3) years*. The trainee real estate appraiser application shall be accompanied by verification from the supervising appraiser's certification authority verifying that the supervising appraiser's certification is active, in good standing, and has not been disciplined as provided in this subsection.; **and**

(D) Upon application for certification, trainees that are supervised by an appraiser certified in another state shall be required to comply with all certification requirements established by Missouri law,

including 20 CSR 2245-3.010(5), which provides that fifty percent (50%) of all experience hours must be completed in the state of Missouri. Trainees are also reminded that pursuant to 20 CSR 2245-3.010, applicants for a general certification must have accumulated a total of three thousand (3,000) hours of appraisal experience of which at least fifty percent (50%) (one thousand five hundred (1,500) hours) shall be in nonresidential appraisal work and under the supervision of a Missouri certified general real estate appraiser or a certified general appraiser certified in another state and who is authorized to perform the same scope of appraisal services as a Missouri-certified general appraiser.

**[(7)](8)** As used in this section, "direct supervision" shall mean, the degree of supervision required of a supervisory appraiser overseeing the work of a registrant by which the supervisory appraiser has control over and detailed professional knowledge of the work being done. Direct supervision is achieved when a registrant has regular direction, guidance, and support from a supervisory appraiser. The supervisor shall determine the level of supervision that is appropriate for the appraisal project and the skill level of the registrant as assessed by the supervisor. Direct supervision shall include but is not limited to the following:

(A) Reviewing the registrant's appraisal report(s) to ensure research of general and specific data has been adequately conducted and properly reported, application of appraisal principles and methodologies has been properly applied, that any analysis is sound and adequately reported, and that any analysis, opinions, or conclusions are adequately developed and reported so that the appraisal report is not misleading; and

(B) Reviewing the registrant's work product and discussing with the registrant any edits, corrections, or modifications that need to be made.

**AUTHORITY:** section 339.509(8), RSMo [2000] Supp. 2012. Original rule filed Nov. 21, 2006, effective July 30, 2007. For intervening history, please consult the **Code of State Regulations**. Amended: Filed Nov. 13, 2012.

**PUBLIC COST:** This proposed amendment will increase revenue for the Missouri State Highway Patrol by approximately two thousand six hundred ten dollars (\$2,610) annually for the life of the rule.

**PRIVATE COST:** This proposed amendment will cost private entities approximately two thousand six hundred ten dollars (\$2,610) annually for the life of the rule.

**NOTICE TO SUBMIT COMMENTS:** Anyone may file a statement in support of or in opposition to this proposed amendment with the Real Estate Appraisers Commission, PO Box 1335, Jefferson City, MO 65102, by facsimile at (573) 526-3489, or via email at [reacom@pr.mo.gov](mailto:reacom@pr.mo.gov). To be considered, comments must be received within thirty (30) days after publication of this notice in the **Missouri Register**. No public hearing is scheduled.

## PUBLIC FISCAL NOTE

## I. RULE NUMBER

Title 20 - Department of Insurance, Financial Institutions and Professional Registration

Division 2245 - Missouri Real Estate Appraisers Commission

Chapter 3 - Applications for Certification and Licensure

Proposed Amendment - 20 CSR 2245-3.005 Trainee Real Estate Appraiser Registration

Prepared November 7, 2012 by the Division of Professional Registration

## II. SUMMARY OF FISCAL IMPACT

Affected Agency or Political Subdivision	Estimated Increase in Revenue	
Missouri State Highway Patrol		\$2,610.00
	Total Annual Increase in Revenue for the Life of the Rule	\$2,610.00

## III. WORKSHEET

See Private Entity Fiscal Note

## IV. ASSUMPTION

1. The board anticipates the total estimated cost will recur annually for the life of the rule, may vary with inflation and is expected to increase at the rate projected by the Legislative Oversight Committee.
2. The estimated fingerprinting fee is a pass through fee determined by the Federal Bureau of Investigation and the Missouri State Highway Patrol. The commission does not establish or receive fingerprint fees.

**PRIVATE FISCAL NOTE**

**I. RULE NUMBER**

**Title 20 - Department of Insurance, Financial Institutions and Professional Registration**  
**Division 2245 - Missouri Real Estate Appraisers Commission**  
**Chapter 3 - Applications for Certification and Licensure**  
**Proposed Amendment - 20 CSR 2245-3.005 Trainee Real Estate Appraiser Registration**  
Prepared November 7, 2012 by the Division of Professional Registration

**II. SUMMARY OF FISCAL IMPACT**

**First Year of Implementation of Rule**

Estimate the number of entities by class which would likely be affected by the adoption of the proposed rule:	Classification by type of the business entities which would likely be affected:	Estimated cost of compliance with the rule by affected entities:
50	Applicants for Licensure as an Occupational Therapist Assistant (Background check @ \$49.45)	\$2,610.00
<b>Estimated Annual Cost of Compliance for the Life of the Rule</b>		<b>\$2,610.00</b>

**III. WORKSHEET**

See Table Above

**IV. ASSUMPTION**

1. Based on FY2012 actual number of trainees registered with the commission, the commission estimates that approximately 50 additional trainees will register with the commission each year.
2. The estimated fingerprinting fee is a pass through fee determined by the Federal Bureau of Investigation and the Missouri State Highway Patrol. The commission does not establish or receive fingerprint fees.
3. It is anticipated that the total costs will recur for the life of the rule, may vary with inflation and is expected to increase at the rate projected by the Legislative Oversight Committee.

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION  
Division 2245—Real Estate Appraisers  
Chapter 3—Applications for Certification and Licensure**

**PROPOSED AMENDMENT**

**20 CSR 2245-3.010 Applications for Certification and Licensure.**  
The board is proposing to amend sections (3) and (5).

*PURPOSE: This amendment implements an age requirement for real estate appraiser applicants.*

(3) The commission may require each applicant for a certificate or license to furnish, at his/her expense, any information deemed necessary by the commission to determine the applicant's qualifications for a certificate or license. **All applicants shall be at least eighteen (18) years of age and have a high school diploma or the equivalent at the time of application.**

(5) Prerequisite for Certification.

(A) State-Certified General Real Estate Appraiser.

1. As a prerequisite for certification as a state-certified general real estate appraiser, an applicant shall present satisfactory evidence to the commission that the applicant possesses three thousand (3,000) hours of appraisal experience obtained continuously over a period of not less than thirty (30) months. *[The applicant must have at least fifty percent (50%) of the required experience hours in the state of Missouri.]* Hours may be treated as cumulative in order to achieve the necessary three thousand (3,000) hours of appraisal experience, and there are no limitations on the number of hours which may be awarded in any year. The applicant, for experience credit, shall have accumulated a total of three thousand (3,000) hours of appraisal experience of which at least fifty percent (50%) (one thousand five hundred (1,500) hours) shall be in non-residential appraisal work and under the supervision of a state-certified general real estate appraiser.

(B) State-Certified Residential Appraiser.

1. The prerequisite for certification as a state-certified residential appraiser shall be two thousand five hundred (2,500) hours of appraisal experience obtained continuously over a period of not less than twenty-four (24) months under the supervision of a state-certified real estate appraiser. *[The applicant must have at least fifty percent (50%) of the required experience hours in the state of Missouri.]* Hours may be treated as cumulative in order to achieve the necessary two thousand five hundred (2,500) hours of appraisal experience, and there is no limitation on the number of hours which may be awarded in any year. Each applicant for certification shall furnish, under oath, a detailed listing of the real estate appraisal reports or file memoranda for each year for which experience is claimed by the applicant. Upon request, the applicant shall make available to the commission a sample of appraisal reports which the applicant has prepared in the course of the applicant's appraisal practice. For the purposes of this section, "prepared" means the participation in any function of the real estate appraisal report. Education may not be substituted for experience except as allowed in section (8) of this rule. All experience shall have been obtained after January 30, 1989, and shall be *Uniform Standards of Professional Appraisal Practice* (USPAP) compliant. The USPAP, 2012 Edition, is incorporated herein by reference and can be obtained from The Appraisal Foundation, 1155 15th Street NW, Suite 1111, Washington, DC 20005, by calling (202) 347-7722, or at [www.appraisalfoundation.org](http://www.appraisalfoundation.org). This rule does not incorporate any subsequent amendments or additions to the USPAP. Acceptable appraisal experience as defined by the Appraiser Qualifications Board (AQB) includes, but is not limited to, the following (this should not be construed as limiting credit to only those individuals

who are state-certified or state-licensed):

- A. Fee and staff appraisal;
- B. *Ad valorem* tax appraisal;
- C. Technical review appraisal;
- D. Appraisal analysis;
- E. Real estate consulting;
- F. Highest and best use analysis;
- G. Feasibility analysis/study; and
- H. Condemnation appraisal.

(C) State-Licensed Real Estate Appraiser.

1. As a prerequisite for licensure as a state-licensed real estate appraiser, an applicant shall present satisfactory evidence to the commission that the applicant possesses the equivalent of two thousand (2,000) hours of appraisal experience obtained over a period of not less than twelve (12) months under the supervision of a state-certified real estate appraiser and supported by adequate written reports or file memoranda. *[The applicant must have at least fifty percent (50%) of the required experience hours in the state of Missouri.]* Hours may be treated as cumulative in order to achieve the necessary two thousand (2,000) hours of appraisal experience.

(D) *[All]* Applicants.

1. Each applicant for licensure shall furnish, under oath, a summarized listing of the real estate appraisal reports or file memoranda for each year for which experience is claimed by the applicant. Upon request, the applicant shall make available to the commission a sample of the appraisal reports that the applicant has prepared in the course of the applicant's appraisal practice. For the purposes of this section, "prepared" means the participation in any functions of the real estate appraisal report.

2. Education may not be substituted for experience except as allowed in section (8) of this rule. All experience shall have been obtained after January 30, 1989, and shall be USPAP compliant. Acceptable appraisal experience as defined by the AQB includes, but is not limited to, the following (this should not be construed as limiting credit to only those individuals who are state-certified or state-licensed):

- A. Fee and staff appraisal;
- B. *Ad valorem* tax appraisal;
- C. Technical review appraisal;
- D. Appraisal analysis;
- E. Real estate consulting;
- F. Highest and best use analysis;
- G. Feasibility analysis/study; and
- H. Condemnation appraisal.

**AUTHORITY:** sections 339.509, [RSMo 2000, and sections] 339.515, and 339.517, RSMo Supp. [2010] 2012. This rule originally filed as 4 CSR 245-3.010. Emergency rule filed Dec. 6, 1990, effective Dec. 16, 1990, expired April 14, 1991. Emergency rule filed April 4, 1991, effective April 14, 1991, expired Aug. 11, 1991. Original rule filed Jan. 3, 1991, effective April 29, 1991. For intervening history, please consult the *Code of State Regulations*. Amended: Filed Nov. 13, 2012.

**PUBLIC COST:** This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

**PRIVATE COST:** This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate.

**NOTICE TO SUBMIT COMMENTS:** Anyone may file a statement in support of or in opposition to this proposed amendment with the Real Estate Appraisers Commission, PO Box 1335, Jefferson City, MO 65102, by facsimile at (573) 526-3489, or via email at [reacom@pr.mo.gov](mailto:reacom@pr.mo.gov). To be considered, comments must be received within thirty (30) days after publication of this notice in the *Missouri Register*. No public hearing is scheduled.

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION**

**Division 2245—Real Estate Appraisers  
Chapter 4—Certificates and Licenses**

**PROPOSED AMENDMENT**

**20 CSR 2245-4.050 Nonresident Certification or Licensure; Reciprocity.** The commission is amending section (2) and deleting section (4).

*PURPOSE: This amendment clarifies and qualifies who may obtain a nonresident certificate or license and the condition for renewal.*

(2) The commission may issue a certificate or license to an individual who is certified or licensed in *[his/her state of domicile] a state*, provided the commission is furnished verification that the appraiser is in good standing *[with his/her state of domicile and any other state that he/she has held licensure or certification]*, the state the appraiser is coming from is in compliance with the Appraisal Subcommittee (ASC), and the credentialing requirements of that state (as they currently exist) meet or exceed those of the reciprocal credential state (as they currently exist). *[An individual applicant for a certificate or license who is not certified or licensed in his/her state of domicile may be granted a certificate or license as long as the applicant has at least fifty percent (50%) of the required experience hours in the state of Missouri and upon meeting all other requirements of a resident for that certificate or license.]*

*[(4) The commission may exempt the examination, application process, application and/or fees, as prescribed by the certification or licensure law a nonresident individual duly certified or licensed in any other state under the laws of which a similar exemption is extended to licensees of Missouri, provided a written agreement for reciprocal certification or licensure exists between the licensing authorities of the states involved. A nonresident applicant may petition the commission to waive the examination when a written agreement for reciprocal certification or licensure does not exist between Missouri and the nonresident's state of domicile. A nonresident applicant shall provide the commission with a letter from the licensing authority of his/her state of domicile indicating that the nonresident applicant successfully passed an examination approved by the Appraisal Qualifications Board of the Appraisal Foundation.]*

**AUTHORITY:** sections 339.509[,] and 339.521, *RSMo Supp. 2012*, and section 339.523, *RSMo 2000*. This rule originally filed as 4 CSR 245-4.050. Emergency rule filed Dec. 6, 1990, effective Dec. 16, 1990, expired April 14, 1991. Emergency rule filed April 4, 1991, effective April 14, 1991, expired Aug. 11, 1991. Original rule filed Jan. 3, 1991, effective April 29, 1991. For intervening history, please consult the *Code of State Regulations*. Amended: Filed Nov. 13, 2012.

**PUBLIC COST:** This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

**PRIVATE COST:** This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate.

**NOTICE TO SUBMIT COMMENTS:** Anyone may file a statement in support of or in opposition to this proposed amendment with the Real Estate Appraisers Commission, PO Box 1335, Jefferson City, MO 65102, by facsimile at (573) 526-3489, or via email at [reacom@pr.mo.gov](mailto:reacom@pr.mo.gov). To be considered, comments must be received

*within thirty (30) days after publication of this notice in the Missouri Register. No public hearing is scheduled.*

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION**

**Division 2245—Real Estate Appraisers  
Chapter 5—Fees**

**PROPOSED AMENDMENT**

**20 CSR 2245-5.020 Application, Certificate and License Fees.** The commission is proposing to delete section (1), amend and renumber section (2), and add new section (2).

*PURPOSE: This amendment sets the fees for appraisal management companies and eliminates the six- (6-) month extension fee.*

*[(1) An application fee of one hundred twenty-five dollars (\$125) shall be paid upon original application for certification or licensure to defray the expense of processing and investigating the application.]*

*[(2)](1) The following fees shall be paid by real estate appraiser applicants and licensees for original application, issuance, and renewal of certificates or licenses:*

<i>(A) [Initial Certification/Licensure Fee]</i>	
<b>Application Fee—to be paid upon original application for certification or licensure to defray the expense of processing and investigating the application</b>	<b><i>[\$400] \$300</i></b>
(B) License/Certification Renewal Fee	\$300
(C) Delinquent Renewal Fee (per month not to exceed a maximum of \$600)	\$ 50
(D) Reissuance of a <i>[C]</i> certificate or <i>[L]</i> license, or <i>[R]</i> replacement of a <i>[L]</i> lost, <i>[D]</i> destroyed, or <i>[S]</i> stolen <i>[C]</i> certificate or <i>[L]</i> license <i>[F]</i> fee	\$ 5
(E) Reissuance of a wallhanging certificate, or replacement of a lost, destroyed, or stolen wallhanging certificate	\$ 15
<i>[(F) Six (6)-Month Extension Fee]</i>	<b><i>\$100]</i></b>
<i>[(G)](F) Temporary Practice Permit (valid for six (6) months)</i>	\$150
<i>[(H)](G) Letter of Good Standing (per letter)</i>	\$ 10
<i>[(I)](H) Fingerprint Background Check Fee—</i> Determined by the Missouri State Highway Patrol (MSHP) or its approved vendor	
<i>[(J)](I) Continuing Education Course Approval Fee (per course)</i>	\$ 25
<i>[(K)](J) Continuing Education Course Renewal Fee (per course)</i>	\$ 10
<i>[(L)](K) Reinstatement Fee</i>	\$300
<i>[(M)](L) Inactive Renewal Fee</i>	\$ 50

**(2) The following fees shall be paid by appraisal management companies for original application, issuance, and renewal of license:**

(A) Initial Application Fee	\$350
(B) License Renewal Fee	\$350
(C) Delinquent Renewal Fee	\$100
(D) Reissuance of a license or replacement of a lost, destroyed, or stolen license	\$ 5
(E) Fingerprint Background Check Fee— Determined by the Missouri State Highway Patrol (MSHP) or its approved vendor	

*AUTHORITY:* sections 339.509, [RSMo 2000 and sections] 339.513, and 339.525.[5]4, RSMo Supp. [2008] 2012. This rule originally filed as 4 CSR 245-5.020. Emergency rule filed Dec. 6, 1990, effective Dec. 16, 1990, expired April 14, 1991. Emergency rule filed April 4, 1991, effective April 14, 1991, expired Aug. 11, 1991. Original rule filed Jan. 3, 1991, effective April 29, 1991. For intervening history, please consult the **Code of State Regulations**. Amended: Filed Nov. 13, 2012.

*PUBLIC COST:* This proposed amendment will increase the Missouri Real Estate Appraiser Commission Fund by approximately thirty-four thousand seven hundred sixty-seven dollars (\$34,767) to thirty-four thousand seven hundred eighty dollars (\$34,780) in the first year of implementation, decrease the fund by approximately three thousand six hundred sixteen dollars (\$3,616) annually thereafter, and increase the fund by approximately thirty-five thousand two hundred twelve dollars (\$35,212) to thirty-five thousand two hundred twenty-five dollars (\$35,225) biennially thereafter for the life of the rule. It is anticipated that the costs and savings will recur for the life of the rule, may vary with inflation and are expected to increase at the rate projected by the Legislative Oversight Committee.

*PRIVATE COST:* This proposed amendment will cost private entities approximately thirty-nine thousand five hundred twenty-five dollars (\$39,525) in the first year of implementation, save private entities approximately three thousand six hundred nine dollars (\$3,609) annually, and cost private entities approximately thirty-five thousand five hundred forty-five dollars (\$35,545) biennially for the life of the rule. It is anticipated that the costs and savings will recur for the life of the rule, may vary with inflation and are expected to increase at the rate projected by the Legislative Oversight Committee.

*NOTICE SUBMIT COMMENTS:* Anyone may file a statement in support of or in opposition to this proposed amendment with the Missouri Real Estate Appraisers Commission at PO Box 1335, Jefferson City, MO 65102-1335, by email to [reacom@pr.mo.gov](mailto:reacom@pr.mo.gov), or by facsimile to (573) 526-3489. To be considered, comments must be received within thirty (30) days after publication of this notice in the **Missouri Register**. No public hearing is scheduled.



**PUBLIC FISCAL NOTE**

**I. RULE NUMBER**

**Title 20 - Department of Insurance, Financial Institutions and Professional Registration**

**Division 2245 Real Estate Appraisers Commission**

**Chapter 5 - Fees**

**Proposed Rule - 20 CSR 2245-5.020 Fees**

**Prepared November 7, 2012 by the Division of Professional Registration**

Affected Agency or Political Subdivision	Estimated Net Effect of Compliance	
Real Estate Appraisers Commission	First Year of Implementation	\$34,767.44 to \$34,779.87
	Beginning FY14 and Recurring Annually Thereafter	(\$3,615.85) to (\$3,616.23)
	Beginning FY15 and Recurring Biennially Thereafter	\$35,212.44 to \$35,224.87

**II. SUMMARY OF FISCAL IMPACT**

Affected Agency or Political Subdivision	Estimated Revenue	
Real Estate Appraisers Commission	Estimated Revenue for the First Year of Implementation	\$35,000.00
	Estimation Revenue Beginning FY14 and Recurring Annually Thereafter	(\$3,609.25)
	Estimation Revenue Beginning FY15 and Recurring Biennially Thereafter	\$35,500.00

Affected Agency or Political Subdivision	Estimated Cost of Compliance	
Real Estate Appraisers Commission	Estimated Costs for the First Year of Implementation	\$220.13 to \$232.56
	Estimation Costs Beginning FY14 and Recurring Annually Thereafter	\$6.60 to \$6.98
	Estimation Costs Beginning FY15 and Recurring Biennially Thereafter	\$275.13 to \$287.56

**III. WORKSHEET**

See Private Fiscal Note for explanation of Revenue

**First Year of Implementation****Personal Service**

The Processing Technician II provides technical support, processes applications for licensure, and responds to inquiries related to the licensure law and/or rules and regulations. In this instance, the Processing Technician II will process each application and print and mail each license to qualified applicants who meet the requirements to become licensed as appraisal management companies.

STAFF	ANNUAL SALARY RANGE	SALARY TO INCLUDE FRINGE BENEFIT	HOURLY SALARY	COST PER MINUTE	TIME PER APPLICATION	COST PER APPLICATION	NUMBER OF ITEMS	TOTAL COST
Processing Technician II	\$24,579 to \$26,640	\$36,974 to \$40,075	\$17.78 to \$19.27	\$0.30 to \$0.32	5 minutes	\$1.48 to \$1.61	100	\$148.13 to \$160.56
Total Personal Service Costs During the First Year of Implementation								\$148.13 to \$160.56

**Expense and Equipment Dollars During the First Year of Implementation**

Item	Cost	Quantity	Total Cost Per Item
License Printing and Postage	\$0.72	100	\$72.00
Total Expense and Equipment Costs			\$72.00

**Beginning in FY14 and Recurring Annually Thereafter****Personal Service**

The Processing Technician II provides technical support, processes applications for licensure, and responds to inquiries related to the licensure law and/or rules and regulations. In this instance, the Processing Technician II will process each application and print and mail each license to qualified applicants who meet the requirements to become licensed as appraisal management companies.

STAFF	ANNUAL SALARY RANGE	SALARY TO INCLUDE FRINGE BENEFIT	HOURLY SALARY	COST PER MINUTE	TIME PER APPLICATION	COST PER APPLICATION	NUMBER OF ITEMS	TOTAL COST
Processing Technician II	\$24,579 to \$26,640	\$36,974 to \$40,075	\$17.78 to \$19.27	\$0.30 to \$0.32	5 minutes	\$1.48 to \$1.61	3	\$4.44 to \$4.82
Total Personal Service Costs Beginning in FY14 and Recurring Annually Thereafter								\$4.44 to \$4.82

**Expense and Equipment**

Item	Cost	Quantity	Total Cost Per Item
License Printing and Postage	\$0.72	3	\$2.16
Total Expense and Equipment Costs			\$2.16

**Beginning in FY15 and Recurring Biennially Thereafter**

**Personal Service**

The Processing Technician II provides technical support, processes applications for licensure, and responds to inquiries related to the licensure law and/or rules and regulations. In this instance, the Processing Technician II will process each application and print and mail each license to qualified applicants who meet the requirements to become licensed as appraisal management companies.

STAFF	ANNUAL SALARY RANGE	SALARY TO INCLUDE FRINGE BENEFIT	HOURLY SALARY	COST PER MINUTE	TIME PER APPLICATION	COST PER APPLICATION	NUMBER OF ITEMS	TOTAL COST
Processing Technician II	\$24,579 to \$26,640	\$36,974 to \$40,075	\$17.78 to \$19.27	\$0.30 to \$0.32	5 minutes	\$1.48 to \$1.61	100	\$148.13 to \$160.56
<b>Total Personal Service Costs Beginning in FY14 and Recurring Annually Thereafter</b>								<b>\$148.13 to \$160.56</b>

**Expense and Equipment**

Item	Cost	Quantity	Total Cost Per Item
Renewal Mailing Envelope and Postage	\$0.55	100	\$55.00
License Printing and Postage	\$0.72	100	\$72.00
<b>Total Expense and Equipment Costs</b>			<b>\$127.00</b>

**IV. ASSUMPTION**

1. Employees' salaries were calculated using the annual salary multiplied by 50.43% for fringe benefits and then divided by 2080 hours per year to determine the hourly salary. The hourly salary was then divided by 60 minutes to determine the cost per minute. The cost per minute was then multiplied by the amount of time individual staff spent on the processing of applications or renewals. The total cost was based on the cost per application multiplied by the estimated number of applications.
2. The board estimates that there are approximately 100 appraisal management companies that will seek licensure during the first year of implementation and 3 companies each year after the first year of implementation.
3. It is anticipated that the total costs will recur for the life of the rule, may vary with inflation, and are expected to increase at the rate projected by the Legislative Oversight Committee.

NOTE: The public fiscal note for this rule only reflects the cost for this particular process. However, private entity fees are set at an amount to cover the total actual cost incurred by the office, which includes personal service, expense and equipment and transfers.

## PRIVATE FISCAL NOTE

## I. RULE NUMBER

Title 20 - Department of Insurance, Financial Institutions and Professional Registration

Division 2245 - Real Estate Appraisers

Chapter 5 - Fees

Proposed Rule - 20 CSR 2245-5.020 Fees

Prepared November 7, 2012 by the Division of Professional Registration

## II. SUMMARY OF FISCAL IMPACT

## During First Year of Implementation of the Rule

Estimate the number of entities by class which would likely be affected by the adoption of the proposed rule:	Classification by type of the business entities which would likely be affected:	Estimated cost of compliance with the rule by affected entities:
0	Real Estate Appraisers Six-Month Extension Fee (Extension Fee @ \$100)	\$0.00
100	Appraisal Management Company (Initial Application Fee @	\$35,000.00
100	Appraisal Management Company (Initial Application Fee @	\$35,000.00
100	Appraisal Management Company (Fee to be determined by the Missouri State Highway Patrol - Currently \$44.80)	\$4,480.00
100	Appraisal Management Company (Postage @ \$0.45)	\$45.00
Estimated Cost of Compliance During the First Year of Implementation		\$39,525.00

**Recurring Annually After the First Year of Implementation**

Estimate the number of entities by class which would likely be affected by the adoption of the proposed rule:	Classification by type of the business entities which would likely be affected:	Estimated cost of compliance with the rule by affected entities:
20	Application Fees (Fee @ \$125)	(\$2,500.00)
23	Initial Certification/Licensure (Fee Decrease @ \$100)	(\$2,300.00)
3	Appraisal Management Company (Initial Application Fee @	\$1,050.00
3	Appraisal Management Company (Fee to be determined by the Missouri State Highway Patrol - Currently \$44.80)	\$134.40
3	Appraisal Management Company (Postage @ \$0.45)	\$1.35
1	Appraisal Management Company (Reissuance or Replacement Fee @ \$5)	\$5.00
	<b>Estimated Cost of Compliance Beginning in FY2014 and Recurring Annually Thereafter</b>	<b>(\$3,609.25)</b>

**Recurring Biennially After the First Year of Implementation**

Estimate the number of entities by class which would likely be affected by the adoption of the proposed rule:	Classification by type of the business entities which would likely be affected:	Estimated cost of compliance with the rule by affected entities:
100	Appraisal Management Company (License Renewal Fee @ \$350)	\$35,000.00
100	Appraisal Management Company (Postage @ \$0.45)	\$45.00
5	Appraisal Management Company (Delinquent Renewal Fee @ \$100)	\$500.00
	<b>Estimated Cost of Compliance Beginning in FY2014 and Recurring Biennially Thereafter</b>	<b>\$35,545.00</b>

**III. WORKSHEET**

See tables above.

**IV. ASSUMPTION**

1. The commission has received no requests from real estate appraisers for the six-month extension. Therefore, this fee is being eliminated. The commission will not experience a loss of revenue based on the elimination of this fee.
2. The commission estimates that there are approximately 100 appraisal management companies that will seek licensure during the first year of implementation.
3. The commission estimates that there will be approximately 3 appraisal management companies that will seek licensure annually after the first year of implementation for the life of the rule.
4. It is anticipated that the total cost will recur for the life of the rule, may vary with inflation and is expected to increase at the rate projected by the Legislative Oversight

NOTE: The commission is statutorily obligated to enforce and administer the provisions of sections 339.500-339.549, RSMo. Pursuant to Section 339.513, RSMo, the fees shall be in amounts set by the commission in order to offset the cost and expense of administering sections 339.500 to 339.549, and in amounts to be determined by the commission with reference to the requirements of Section 1109 of the United States Public Law 101-73, as later codified and as may be amended.

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION  
Division 2245—Real Estate Appraisers  
Chapter 6—Educational Requirements**

**PROPOSED RULE**

**20 CSR 2245-6.016 Examinations and Education**

*PURPOSE: This rule defines the examination and education requirements for each level of registration, licensure, and certification for real estate appraisers.*

**(1) Examination and Education Requirements.**

**(A) State-Certified General Real Estate Appraiser.**

1. To obtain certification as a state-certified general real estate appraiser, an applicant shall successfully complete the Appraiser Qualifications Board (AQB) approved state-certified general real property examination. There is no alternative to successful completion of the examination.

A. Applicants who are able to successfully complete all requirements for licensure/certification and are approved by the commission on or before December 31, 2014, shall be bound by requirements found in 20 CSR 2245-3.001, 20 CSR 2245-3.005, 20 CSR 2245-3.010, 20 CSR 2245-3.020, and 20 CSR 2245-6.015.

B. All applicants who are not able to successfully complete all requirements for licensure/certification and who have not been approved by the commission on or before December 31, 2014, shall have completed all education and experience requirements contained in 20 CSR 2245-3.005, 20 CSR 2245-3.010, 20 CSR 2245-3.020, and 20 CSR 2245-6.016 prior to being eligible to take the AQB approved examination for the appropriate level of licensure/certification.

**(B) State-Certified Residential Real Estate Appraiser.**

1. To obtain certification as a state-certified residential real estate appraiser, an applicant shall successfully complete the AQB approved state-certified residential real property examination. There is no alternative to successful completion of the examination.

A. Applicants who are able to successfully complete all requirements for licensure/certification and are approved by the commission on or before December 31, 2014, shall be bound by requirements found in 20 CSR 2245-3.001, 20 CSR 2245-3.005, 20 CSR 2245-3.010, 20 CSR 2245-3.020, and 20 CSR 2245-6.015.

B. All applicants who are not able to successfully complete all requirements for licensure/certification and who have not been approved by the commission on or before December 31, 2014, shall have completed all education and experience requirements contained in 20 CSR 2245-3.005, 20 CSR 2245-3.010, 20 CSR 2245-3.020, and 20 CSR 2245-6.016 prior to being eligible to take the AQB approved examination for the appropriate level of licensure/certification.

**(C) State-Licensed Real Estate Appraiser.**

1. To obtain certification as a state-licensed real estate appraiser, an applicant shall successfully complete the AQB approved state-licensed residential real property examination. There is no alternative to successful completion of the examination.

A. Applicants who are able to successfully complete all requirements for licensure/certification and are approved by the commission on or before December 31, 2014, shall be bound by requirements found in 20 CSR 2245-3.001, 20 CSR 2245-3.005, 20 CSR 2245-3.010, 20 CSR 2245-3.020, and 20 CSR 2245-6.015.

B. All applicants who are not able to successfully complete all requirements for licensure/certification and who have not been approved by the commission on or before December 31, 2014, shall have completed all education and experience requirements contained in 20 CSR 2245-3.005, 20 CSR 2245-3.010, 20 CSR 2245-3.020, and 20 CSR 2245-6.016 prior to being eligible to take the AQB

approved examination for the appropriate level of licensure/certification.

**(D) Trainee Real Estate Appraiser.**

1. There is no examination requirement for registration as a trainee real estate appraiser other than as required to earn credit for completion of the prerequisite educational courses.

**(2) Qualifying Education.**

**(A) State-Certified General Real Estate Appraiser.**

1. Applicants for the state-certified general real estate appraiser certification shall hold a bachelor's degree or higher from an accredited college or university. The college or university must be a degree-granting institute accredited by the Commission on Colleges, a regional or national accreditation association, or by an accrediting agency that is recognized by the U.S. Secretary of Education. Applicants with a college degree from a foreign country may have their education evaluated for "equivalency" by one (1) of the following:

A. An accredited, degree-granting, domestic college or university;

B. The American Association of Collegiate Registrars and Admissions Officers (AACRAO);

C. A foreign degree credential evaluation service company that is a member of the National Association of Credential Evaluation Services (NACES); or

D. A foreign degree credential evaluation service company that provides equivalency evaluation reports accepted by an accredited, degree-granting, domestic college or university or by a state licensing board that issues credentials in another discipline.

2. Credit toward qualifying education requirements may also be obtained via completion of a degree in real estate from an accredited, degree-granting college or university approved by the Association to Advance Collegiate Schools of Business, or a regional or national accreditation agency recognized by the U.S. Secretary of Education, provided that the college or university has had its curriculum reviewed and approved by the AQB.

3. The applicant shall submit verification of completion of three hundred (300) creditable class hours from the core curriculum, including passage of the approved closed-book examination for each course, as follows:

A. Basic Appraisal Principles	30 Hours
B. Basic Appraisal Procedures	30 Hours
C. The 15-Hour National Uniform Standards of Professional Appraisal Practice (USPAP) Course or its equivalent	15 Hours
D. General Appraiser Market Analysis and Highest and Best Use	30 Hours
E. Statistics, Modeling, and Finance	15 Hours
F. General Appraiser Sales Comparison Approach	30 Hours
G. General Appraiser Site Valuation and Cost Approach	30 Hours
H. General Appraiser Income Approach	60 Hours
I. General Appraiser Report Writing and Case Studies	30 Hours
J. Appraisal Subject Matter Electives	30 Hours
Total 300 Hours	

4. Applicants shall demonstrate that their education includes the core courses listed in these criteria, with particular emphasis on non-residential properties.

5. Appraisers holding a valid state-certified general real estate appraiser trainee license may satisfy the educational requirements for the state-certified general real estate appraiser by completing the following additional educational hours:

A. General Appraiser Market Analysis and Highest and Best Use	30 Hours
B. Statistics, Modeling, and Finance	15 Hours
C. General Appraiser Sales Comparison Approach	30 Hours



D. General Appraiser Site Valuation and Cost Approach	30 Hours
E. General Appraiser Income Approach	60 Hours
F. General Appraiser Report Writing and Case Studies	30 Hours
G. Appraisal Subject Matter Electives	30 Hours
	Total 225 Hours

6. Appraisers holding a valid state-licensed real estate appraiser license may satisfy the educational requirements for the state-certified general real estate appraiser by completing the following additional educational hours:

A. General Appraiser Market Analysis and Highest and Best Use	15 Hours
B. Statistics, Modeling, and Finance	15 Hours
C. General Appraiser Sales Comparison Approach	15 Hours
D. General Appraiser Site Valuation and Cost Approach	15 Hours
E. General Appraiser Income Approach	45 Hours
F. General Appraiser Report Writing and Case Studies	15 Hours
G. Appraisal Subject Matter Electives	30 Hours
	Total 150 Hours

7. Appraisers holding a valid state-certified residential real estate appraiser certification may satisfy the educational requirements for the state-certified general real estate appraiser by completing the following additional educational hours:

A. General Appraiser Market Analysis and Highest and Best Use	15 Hours
B. General Appraiser Sales Comparison Approach	15 Hours
C. General Appraiser Site Valuation and Cost Approach	15 Hours
D. General Appraiser Income Approach	45 Hours
E. General Appraiser Report Writing and Case Studies	10 Hours
	Total 100 Hours

(B) State-Certified Residential Real Estate Appraiser.

1. Applicants for the state-certified residential real estate appraiser certification shall hold a bachelor's degree or higher from an accredited college or university. The college or university must be a degree-granting institution accredited by the Commission on Colleges, a regional or national accreditation association, or by an accrediting agency that is recognized by the U.S. Secretary of Education. Applicants with a college degree from a foreign country may have their education evaluated for "equivalency" by one (1) of the following:

A. An accredited, degree-granting, domestic college or University;

B. The American Association of Collegiate Registrars and Admissions Officers (AACRAO);

C. A foreign degree credential evaluation service company that is a member of the National Association of Credential Evaluation Services (NACES); or

D. A foreign degree credential evaluation service company that provides equivalency evaluation reports accepted by an accredited, degree-granting, domestic college or university, or by a state licensing board that issues credentials in another discipline.

2. Credit toward qualifying education requirements may also be obtained via completion of a degree in real estate from an accredited, degree-granting college or university approved by the Association to Advance Collegiate Schools of Business, or a regional or national accreditation agency recognized by the U.S. Secretary of Education, provided that the college or university has had its curriculum reviewed and approved by the AQB.

3. The applicant shall submit verification of completion of two hundred (200) creditable class hours from the core curriculum,

including passage of the approved closed-book examination for each course, as follows:

A. Basic Appraisal Principles	30 Hours
B. Basic Appraisal Procedures	30 Hours
C. The 15-Hour National Uniform Standards of Professional Appraisal Practice (USPAP) Course or its equivalent	15 Hours
D. Residential Market Analysis and Highest and Best Use	15 Hours
E. Residential Appraiser Site Valuation and Cost Approach	15 Hours
F. Residential Sales Comparison and Income Approaches	30 Hours
G. Residential Report Writing and Case Studies	15 Hours
H. Statistics, Modeling, and Finance	15 Hours
I. Advanced Residential Applications and Case Studies	15 Hours
J. Appraisal Subject Matter Electives	20 Hours
	Total 200 Hours

4. Appraisers holding a valid state-certified residential real estate appraiser trainee license may satisfy the educational requirements for the state-certified residential real estate appraiser certification by completing the following additional educational hours:

A. Residential Market Analysis and Highest and Best Use	15 Hours
B. Residential Appraiser Site Valuation and Cost Approach	15 Hours
C. Residential Sales Comparison and Income Approaches	30 Hours
D. Residential Report Writing and Case Studies	15 Hours
E. Statistics, Modeling, and Finance	15 Hours
F. Advanced Residential Applications and Case Studies	15 Hours
G. Appraisal Subject Matter Electives	20 Hours
	Total 125 Hours

5. Appraisers holding a state-licensed real estate appraiser license may satisfy the educational requirements for the state-certified residential real estate appraiser credential by completing the following additional educational hours:

A. Statistics, Modeling, and Finance	15 Hours
B. Advanced Residential Applications and Case Studies	15 Hours
C. Appraisal Subject Matter Electives	20 Hours
	Total 50 Hours

(C) State-Licensed Real Estate Appraiser.

1. Applicants for the state-licensed real estate appraiser license shall successfully complete 30 (thirty) semester hours of college-level education from an accredited college, junior college, community college, or university. The college or university must be a degree-granting institution accredited by the Commission on Colleges, a regional or national accreditation association, or by an accrediting agency that is recognized by the U.S. Secretary of Education. If an accredited college or university accepts the College-Level Examination Program (CLEP) and examinations and issues a transcript for the exam, showing its approval, it will be considered as credit for the college course. Applicants holding an associate degree or higher from an accredited college, junior college, community college, or university satisfy the thirty- (30-) hour college level education requirement.

2. Applicants with a college degree from a foreign country may have their education evaluated for "equivalency" by one (1) of the following:

A. An accredited, degree-granting, domestic college or university;

B. The American Association of Collegiate Registrars and Admissions Officers (AACRAO);



C. A foreign degree credential evaluation service company that is a member of the National Association of Credential Evaluation Services (NACES); or

D. A foreign degree credential evaluation service company that provides equivalency evaluation reports accepted by an accredited, degree-granting, domestic college or university or by a state licensing board that issues credentials in another discipline.

3. Credit toward qualifying education requirements may also be obtained via completion of a degree in real estate from an accredited, degree-granting, college or university approved by the Association to Advance Collegiate Schools of Business, or a regional or national accreditation agency recognized by the U.S. Secretary of Education, provided that the college or university has had its curriculum reviewed and approved by the AQB.

4. The applicant shall submit verification of completion of one hundred fifty (150) creditable class hours from the core curriculum, including passage of the approved closed-book examination for each course, as follows:

A. Basic Appraisal Principles	30 Hours
B. Basic Appraisal Procedures	30 Hours
C. The 15-Hour National Uniform Standards of Professional Appraisal Practice (USPAP) Course or its equivalent	15 Hours
D. Residential Market Analysis and Highest and Best Use	15 Hours
E. Residential Appraiser Site Valuation and Cost Approach	15 Hours
F. Residential Sales Comparison and Income Approaches	30 Hours
G. Residential Report Writing and Case Studies	15 Hours
Total 150 Hours	

5. Appraisers holding a valid state-licensed real estate appraiser trainee license may satisfy the educational requirements for the state-licensed real estate appraiser by completing the following additional educational hours:

A. Residential Market Analysis and Highest and Best Use	15 Hours
B. Residential Appraiser Site Valuation and Cost Approach	15 Hours
C. Residential Sales Comparison and Income Approaches	30 Hours
D. Residential Report Writing and Case Studies	15 Hours
Total 75 Hours	

(D) Trainee Appraiser.

1. Applicants for a state-licensed real estate appraiser trainee, state-certified residential real estate appraiser trainee, or state-certified general real estate appraiser trainee shall submit verification of completion of seventy-five (75) creditable class hours from the core curriculum taken within the five (5) year period prior to the date of submission of the application, including passage of the approved closed-book examination for each course, as follows:

A. National USPAP Course	15 hours
B. Basic Appraisal Principles	30 hours
C. Basic Appraisal Procedures	30 hours
Total 75 Hours	

**AUTHORITY:** sections 339.509, 339.511, and 339.515, *RSMo Supp. 2012*, and 339.544, *RSMo 2000*. Original rule filed Nov. 13, 2012.

**PUBLIC COST:** This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

**PRIVATE COST:** This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate.

**NOTICE TO SUBMIT COMMENTS:** Anyone may file a statement in support of or in opposition to this proposed rule with the Real Estate Appraisers Commission, PO Box 1335, Jefferson City, MO 65102, by facsimile at (573) 526-3489, or via email at [reacom@pr.mo.gov](mailto:reacom@pr.mo.gov). To be considered, comments must be received within thirty (30) days after publication of this notice in the *Missouri Register*. No public hearing is scheduled.

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION**

**Division 2245—Real Estate Appraisers  
Chapter 10—Appraisal Management Company**

**PROPOSED RULE**

**20 CSR 2245-10.010 Appraisal Management Company Application Requirements**

**PURPOSE:** This rule informs applicants of the requirements, procedures, and qualifications necessary for obtaining a license.

(1) To apply for a license, an appraisal management company (AMC) shall submit a nonrefundable initial application fee as established by rule in 20 CSR 2245-5.020(2) along with the written application on a form provided by the commission which shall include but is not limited to the following information:

- (A) Name of entity seeking registration;
- (B) Business address of entity seeking registration, which shall be located and maintained in this state;
- (C) Phone contact information of the entity seeking registration;
- (D) If the entity is not a corporation that is domiciled in this state, the name and contact information for the company's agent for services of process in this state;
- (E) The name, address, and contact information for any individual or any corporation, partnership, or other business entity that owns ten percent (10%) or more of the appraisal management company;
- (F) The name, address, and contact information for a designated controlling person to be the primary communication source for the commission;
- (G) Proof of submission of fingerprints to the Missouri State Highway Patrol's approved vendor for both a Missouri State Highway Patrol and Federal Bureau of Investigation background check for the controlling person and each person who owns more than ten percent (10%) of an appraisal management company as listed on the application; and
- (H) A surety bond in the amount of twenty thousand dollars (\$20,000).

(2) An AMC which operates in this state under more than one business name (d.b.a. or "doing business as") shall apply for licensure with the commission for each name under which it does business.

(3) The initial application submitted by the appraisal management company shall include the following certifications:

- (A) That the AMC has a system in place to verify appraisers on their panel are licensed by the Missouri Real Estate Appraisers Commission and hold a current, valid, unencumbered license to practice in the state of Missouri;
- (B) That the AMC has in place a system to review the work of all independent appraisers performing appraisal services and that the services are conducted in compliance with the Uniform Standards of Professional Appraisal Practice;
- (C) That the AMC maintains a detailed record of each service request that it receives for appraisal services in Missouri and the appraiser who performs the appraisal services for the AMC; and
- (D) That the AMC has reviewed each person or entity that owns

more than ten percent (10%) of the AMC and that no person or entity that owns more than ten percent (10%) of the AMC is more than ten percent (10%) owned by any person who has had a license or certificate to act as an appraiser refused, denied, cancelled, revoked, or surrendered in lieu of a pending revocation in Missouri or in any other state.

(4) An AMC shall notify the commission in writing within thirty (30) days of a change in its controlling person, agent of record, or ownership composition.

(5) Each application for an appraisal management company registration shall be made in the name of the person or business entity authorized to conduct business in Missouri. No registration shall be issued to a company that has no legal recognition. A Missouri AMC shall maintain a current and active authorization to conduct business in Missouri with the Missouri Secretary of State.

*AUTHORITY: sections 43.543, 339.509, 339.511, and 339.513, RSMo Supp. 2012, and section 339.544, RSMo 2000. Original rule filed Nov. 13, 2012.*

*PUBLIC COST: This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.*

*PRIVATE COST: This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate.*

*NOTICE SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed rule with the Missouri Real Estate Appraisers Commission at PO Box 1335, Jefferson City, MO 65102-1335, by email to reacom@pr.mo.gov, or by facsimile to (573) 526-3489. To be considered, comments must be received within thirty (30) days after publication of this notice in the Missouri Register. No public hearing is scheduled.*

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION  
Division 2245—Real Estate Appraisers  
Chapter 10—Appraisal Management Company**

**PROPOSED RULE**

**20 CSR 2245-10.020 Appraisal Management Company Standards of Practice**

*PURPOSE: This rule informs applicants of the appraisal management company standards of practice.*

(1) An appraisal management company (AMC) that has been issued a registration by the Missouri Real Estate Appraisers Commission under these rules shall be responsible for complying with the following:

(A) Shall maintain with the commission the name and address of a registered agent for service of process and shall furnish the commission within five (5) business days of any changes to the information on file;

(B) Shall maintain a complete record of all requests for appraisal services referred to state licensed and certified appraisers, the amount of fees collected from borrowers or clients as well as payments to the appraisers, and shall make such information available upon commission request;

(C) Shall separately state to the client the fees paid to an appraiser for the appraisal services and the fees charged by the appraisal management company for services associated with the management

of the appraisal process, including procurement of the appraiser's services;

(D) Shall make available to the commission any and all records that are required to be kept or records deemed by the commission to be pertinent to an investigation of a complaint against a registrant;

(E) Shall designate a controlling person responsible for ensuring compliance with the acts and regulations and shall file with the commission a certification identifying the controlling person and that individual's acceptance of these responsibilities;

(F) Shall maintain all records for a period of five (5) years. Additionally, records that are used in judicial proceedings in which the appraiser provided testimony related to the assignment shall be retained for at least two (2) years after disposition;

(G) At any time a document filed with the commission becomes inaccurate or incomplete the registrant shall within thirty (30) days file an amendment correcting the information;

(H) Shall disclose to an appraiser within their engagement documents verification of their state registration with the Missouri Real Estate Appraisers Commission;

(I) Shall not employ any person directly involved in appraisal management services who has had a license or certificate to act as an appraiser in Missouri or in any other state refused, denied, cancelled, revoked, or surrendered in lieu of a pending revocation;

(J) Shall not knowingly enter into any independent contractor arrangement, whether in verbal, written, or in other form, with any person who has had a license or certificate to act as an appraiser in Missouri or in any other state refused, denied, cancelled, revoked, or surrendered in lieu of a pending revocation;

(K) Shall not knowingly enter into any contract, agreement, or other business relationship directly involved with the performance of real estate appraisal or appraisal management services, whether in verbal, written, or any other form, with any entity that employs, has entered into an independent contract arrangement, or has entered into any contract, agreement, or other business relationship, whether in verbal, written, or any other form, with any person who has ever had a license or certificate to act as an appraiser in Missouri or in any other state, refused, denied, cancelled, revoked, or surrendered in lieu of a pending revocation;

(L) Shall not prohibit an appraiser who is part of an appraiser panel from recording the fee that the appraiser was paid by the appraisal management company for the performance of the appraisal within the appraisal report;

(M) Shall not require an appraiser to modify any aspect of an appraisal report unless the modification complies with Uniform Standards of Professional Appraisal Practice;

(N) Shall only require an appraiser to prepare an appraisal under a time frame that affords the appraiser, in their own professional judgment, the ability to meet all relevant legal and professional obligations. Appraisers shall decline appraisal assignments made outside of such time frame and shall notify the AMC accordingly;

(O) Shall not prohibit or inhibit legal or other allowable communication between the appraiser and—

1. The lender;
2. A real estate licensee; or
3. Any person from whom the appraiser, in the appraiser's own professional judgment, believes the communication would be relevant;

(P) Shall not require the appraiser to do anything that does not comply with the—

1. Uniform Standards of Professional Appraisal Practice;
2. Sections 339.500 to 339.539, RSMo, and the regulations promulgated thereunder; or
3. Any assignment conditions required by the client;

(Q) Shall not make any portion of the appraiser's fee or the appraisal management company's fee contingent on a predetermined or favorable outcome, including but not limited to:

1. A loan closing; or
2. Specific dollar amount being achieved by the appraiser in the

appraisal report;

(R) Shall not require an appraiser to provide the appraisal management company with the appraiser's digital signature or seal; and

(S) Shall not alter, modify, or otherwise change a completed appraisal report submitted by an appraiser.

(2) No employee, director, officer, or agent of an AMC shall influence or attempt to influence the development, reporting, or review of an appraisal through coercion, extortion, collusion, compensation, instruction, inducement, intimidation, bribery, or in any other manner, including but not limited to:

(A) Withholding or threatening to withhold timely payment for an appraisal, except in cases of substandard performance or noncompliance with conditions of engagement;

(B) Withholding or threatening to withhold future business or demoting, terminating, or threatening to demote or terminate an appraiser;

(C) Expressly or impliedly promising future business, promotions, or increased compensation for an appraiser;

(D) Conditioning the request for an appraisal of the payment of an appraisal fee or salary or bonuses on the opinion, conclusion, or valuation to be reached, or on a preliminary estimate or opinion requested from an appraiser;

(E) Requiring that an appraiser provide an estimated, predetermined, or desired valuation in an appraisal report or provide estimated values or comparable sales at any time prior to the appraiser's completion of an appraisal;

(F) Providing to an appraiser an anticipated, estimated, encouraged, or desired value for a subject property or proposed or target amount to be loaned to the borrower, except that a copy of the sales contract for purchase transactions may be provided;

(G) Providing an appraiser, or any entity or person related to the appraiser, stock or other financial or nonfinancial benefits;

(H) Allowing the removal of an appraiser from an appraiser panel without prior written notice to such appraiser outlining the reason(s) for removal and allowing the appraiser a reasonable amount of time to respond;

(I) Any other act or practice that knowingly impairs or attempts to impair an appraiser's independence, objectivity, or impartiality;

(J) Requiring an appraiser to collect an appraisal fee on behalf of the AMC from the borrower, homeowner, or other third party; or

(K) Requiring an appraiser to indemnify an AMC or hold an appraisal management company harmless for any liability, damage, losses, or claims arising out of the services performed by the AMC, and not the services performed by the appraiser.

(3) Nothing in sections (1) and (2) of this regulation shall prohibit the AMC from requesting that an appraiser—

(A) Provide additional information about the basis for a valuation;

(B) Correct objective factual errors in an appraisal report; or

(C) Provide additional information with the appraisal regarding additional sales provided through an established dispute process.

**AUTHORITY:** sections 339.509 and 339.511, *RSMo Supp.* 2012, and section 339.544, *RSMo* 2000. Original rule filed Nov. 13, 2012.

**PUBLIC COST:** This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

**PRIVATE COST:** This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate.

**NOTICE SUBMIT COMMENTS:** Anyone may file a statement in support of or in opposition to this proposed rule with the Missouri Real Estate Appraisers Commission at PO Box 1335, Jefferson City, MO 65102-1335, by email to [reacom@pr.mo.gov](mailto:reacom@pr.mo.gov), or by facsimile to (573) 526-3489. To be considered, comments must be received within thir-

ty (30) days after publication of this notice in the *Missouri Register*. No public hearing is scheduled.

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION**

**Division 2245—Real Estate Appraisers  
Chapter 10—Appraisal Management Company**

**PROPOSED RULE**

**20 CSR 2245-10.030 Renewal**

**PURPOSE:** This rule establishes the expiration and renewal dates for appraisal management companies.

(1) Every license issued shall expire on June 30 of every even numbered year after the date of issuance. The commission shall mail to each registrant, at least sixty (60) days prior to the expiration date of each renewal year, a notice of the expiration and application for renewal of the license to the address on file with the commission. The commission may issue a new registration for each renewal period upon receipt of a properly completed renewal application, nonrefundable fee as established by rule in 20 CSR 2245-5.020(2), and satisfactory proof that the appraisal management company (AMC) meets all requirements for licensure renewal postmarked before midnight on June 30 of each year of expiration. Delinquent renewals shall be accompanied by a nonrefundable delinquent fee as established by rule in 20 CSR 2245-5.020.

(2) At the time of renewal the AMC shall certify to the commission on the renewal form that—

(A) The AMC has a system and process in place to verify that an individual being added to the appraiser panel holds a license in good standing in this state;

(B) The AMC has a system in place to verify that an individual whom the appraisal AMC is making an assignment for the completion of an appraisal has not had a license or certification as an appraiser refused, denied, cancelled, revoked, or surrendered in Missouri or any other state;

(C) The AMC has a system in place to perform an appraisal review on a periodic basis of the work of all appraisers who are performing appraisals for the AMC to validate the appraisals are being conducted in compliance with the Uniform Standards of Professional Appraisal Practice; and

(D) The AMC maintains a detailed record of each service request for appraisal services within the state of Missouri that it receives from each appraiser who performs an appraisal for the AMC in Missouri.

(3) Failure to receive the notice and application to renew from the commission shall not excuse the registrant from the requirements for renewal contained in this rule.

**AUTHORITY:** sections 339.511 and 339.525, *RSMo Supp.* 2012, and section 339.544, *RSMo* 2000. Original rule filed Nov. 13, 2012.

**PUBLIC COST:** This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

**PRIVATE COST:** This proposed rule will not cost private entities more than five hundred dollars (\$500) in the aggregate.

**NOTICE SUBMIT COMMENTS:** Anyone may file a statement in support of or in opposition to this proposed rule with the Missouri Real Estate Appraisers Commission at PO Box 1335, Jefferson City, MO

65102-1335, by email to [reacom@pr.mo.gov](mailto:reacom@pr.mo.gov), or by facsimile to (573) 526-3489. To be considered, comments must be received within thirty (30) days after publication of this notice in the *Missouri Register*. No public hearing is scheduled.

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION**

**Division 2245—Real Estate Appraisers  
Chapter 10—Appraisal Management Company**

**PROPOSED RULE**

**20 CSR 2245-10.040 Surety Bond Requirements**

*PURPOSE:* This rule establishes surety bond requirements for appraisal management companies.

(1) The appraisal management company (AMC) shall maintain a valid surety bond in the amount of twenty thousand dollars (\$20,000) and shall submit proof of such bond at the time of initial application, upon renewal, upon maintaining the bond after a draw-down, and at any time requested by the commission. The surety bond shall be in a form prescribed by the commission.

(2) The bond shall accrue to the Missouri Real Estate Appraisers Commission for the benefit of a consumer claimant against the AMC to secure the faithful performance of the AMC's obligations pursuant to sections 339.500 through 339.539, RSMo, and regulations validly promulgated thereunder.

(3) The bond shall be issued by a bonding or insurance company authorized to do business in Missouri and shall secure the faithful performance of the AMC, its employees, or agents in connection with the activities of the appraisal management company AMC.

(4) When an action is commenced on the AMC's bond, the commission may require the filing of a new bond. Immediately upon any recovery on the bond, the AMC shall file a new bond with the commission demonstrating the full penal amount of twenty thousand dollars (\$20,000).

(5) The surety bond is for the protection of consumers and the commission may make a claim on the bond on behalf of a consumer sustaining injury as a result of the actions of an AMC not in compliance with or in violation of sections 339.500 through 339.539, RSMo.

(6) Alternatively, in lieu of presenting a claim on the bond directly, the commission may release a copy of the bond to a consumer or the consumer's attorney. The request for release of the bond to the commission shall be in writing and contain sufficient documentation of the basis for the claim and/or a final judgment from a court of law granting the consumer relief against the AMC. The release of the bond from the commission shall be in writing to the consumer or the consumer's attorney.

(7) On receipt by the commission of notice of intent to cancel a bond by a corporate surety, the commission shall immediately notify the AMC that is the principal of the bond of the effective date of the cancellation. The AMC shall provide, from the corporate surety to the commission, no less than sixty (60) days notice prior to cancellation of the bond. Upon notice from the commission of the cancellation of the bond, the AMC shall furnish a like bond before the cancellation date and within seven (7) business days after mailing the notice by the commission. The AMC shall maintain and replace the bond to twenty thousand dollars (\$20,000) after each draw-down and the bond shall remain in effect for the life of the registration and for one

(1) year after expiration, revocation, surrender, or cessation of business by the AMC.

*AUTHORITY:* section 339.511, RSMo Supp. 2012, and section 339.544, RSMo 2000. Original rule filed Nov. 13, 2012.

*PUBLIC COST:* This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

*PRIVATE COST:* This proposed rule will cost private entities approximately twenty thousand to forty thousand dollars (\$20,000–\$40,000) in the first year of implementation and approximately six hundred to one thousand two hundred dollars (\$600–\$1,200) annually thereafter for the life of the rule. It is anticipated that the costs will recur for the life of the rule, may vary with inflation, and are expected to increase at the rate projected by the Legislative Oversight Committee.

*NOTICE SUBMIT COMMENTS:* Anyone may file a statement in support of or in opposition to this proposed rule with the Missouri Real Estate Appraisers Commission at PO Box 1335, Jefferson City, MO 65102-1335, by email to [reacom@pr.mo.gov](mailto:reacom@pr.mo.gov), or by facsimile to (573) 526-3489. To be considered, comments must be received within thirty (30) days after publication of this notice in the *Missouri Register*. No public hearing is scheduled.

**PRIVATE FISCAL NOTE**

**I. RULE NUMBER**

**Title 20 - Department of Insurance, Financial Institutions and Professional Registration**

**Division 2245 - Real Estate Commission**

**Chapter 10 - Appraisal Management Company**

**Proposed Rule - 20 CSR 2245-10.040 Surety Bond Requirements**

Prepared November 7, 2012 by the Division of Professional Registration

**II. SUMMARY OF FISCAL IMPACT**

**First Year of Implementation of Rule**

Estimate the number of entities by class which would likely be affected by the adoption of the proposed rule:	Classification by type of the business entities which would likely be affected:	Estimated cost of compliance with the rule by affected entities:
100	AMC Surety Bond @ \$20,000  (Surety Bond @ \$10 - \$20 / Per \$100)	\$20,000.00 to \$40,000.00
	<b>Estimated Cost of Compliance During the First Year of Implementation</b>	<b>\$20,000.00 to \$40,000.00</b>

**Recurring Annually After the First Year of Implementation**

Estimate the number of entities by class which would likely be affected by the adoption of the proposed rule:	Classification by type of the business entities which would likely be affected:	Estimated cost of compliance with the rule by affected entities:
3	AMC Surety Bond @ \$20,000  (Surety Bond @ \$10 - \$20 / Per \$100)	\$600.00 to \$1,200.00
	<b>Estimated Cost of Compliance Beginning in FY2014 and Recurring Annually Thereafter</b>	<b>\$600.00 to \$1,200.00</b>

**III. WORKSHEET**

See table above.

**IV. ASSUMPTION**

1. The above figures are based on estimates obtained from bonding companies that fees range from \$10 to \$20 per \$100.00 based on the person's credit history.
2. It is anticipated that the total cost will recur for the life of the rule, may vary with inflation and is expected to increase at the rate projected by the Legislative Oversight Committee.

**T**his section will contain the final text of the rules proposed by agencies. The order of rulemaking is required to contain a citation to the legal authority upon which the order or rulemaking is based; reference to the date and page or pages where the notice of proposed rulemaking was published in the *Missouri Register*; an explanation of any change between the text of the rule as contained in the notice of proposed rulemaking and the text of the rule as finally adopted, together with the reason for any such change; and the full text of any section or subsection of the rule as adopted which has been changed from that contained in the notice of proposed rulemaking. The effective date of the rule shall be not less than thirty (30) days after the date of publication of the revision to the *Code of State Regulations*.

**T**he agency is also required to make a brief summary of the general nature and extent of comments submitted in support of or opposition to the proposed rule and a concise summary of the testimony presented at the hearing, if any, held in connection with the rulemaking, together with a concise summary of the agency's findings with respect to the merits of any such testimony or comments which are opposed in whole or in part to the proposed rule. The ninety-(90-) day period during which an agency shall file its order of rulemaking for publication in the *Missouri Register* begins either: 1) after the hearing on the proposed rulemaking is held; or 2) at the end of the time for submission of comments to the agency. During this period, the agency shall file with the secretary of state the order of rulemaking, either putting the proposed rule into effect, with or without further changes, or withdrawing the proposed rule.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 80—State Milk Board  
Chapter 3—Production and Distribution of Grade “A”  
Retail Raw Milk and Milk Products**

**ORDER OF RULEMAKING**

By the authority vested in the State Milk Board under section 196.939, RSMo 2000, the board amends a rule as follows:

**2 CSR 80-3.010 Definitions is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1296). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 80—State Milk Board  
Chapter 3—Production and Distribution of Grade “A”  
Retail Raw Milk and Milk Products**

**ORDER OF RULEMAKING**

By the authority vested in the State Milk Board under section 196.939, RSMo 2000, the board amends a rule as follows:

**2 CSR 80-3.020 The Sale of Adulterated, Ungraded, or  
Misbranded Milk or Milk Products Prohibited  
is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1296). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 80—State Milk Board  
Chapter 3—Production and Distribution of Grade “A”  
Retail Raw Milk and Milk Products**

**ORDER OF RULEMAKING**

By the authority vested in the State Milk Board under section 196.939, RSMo 2000, the board amends a rule as follows:

**2 CSR 80-3.030 Permits is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1297). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 80—State Milk Board  
Chapter 3—Production and Distribution of Grade “A”  
Retail Raw Milk and Milk Products**

**ORDER OF RULEMAKING**

By the authority vested in the State Milk Board under section 196.939, RSMo 2000, the board amends a rule as follows:

**2 CSR 80-3.040 Labeling is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1297). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 80—State Milk Board  
Chapter 3—Production and Distribution of Grade “A”  
Retail Raw Milk and Milk Products**

**ORDER OF RULEMAKING**

By the authority vested in the State Milk Board under section

196.939, RSMo 2000, the board amends a rule as follows:

**2 CSR 80-3.050** Inspection of Production and Distribution  
Facilities **is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1297–1298). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE**  
**Division 80—State Milk Board**  
**Chapter 3—Production and Distribution of Grade “A”**  
**Retail Raw Milk and Milk Products**

**ORDER OF RULEMAKING**

By the authority vested in the State Milk Board under section 196.939, RSMo 2000, the board amends a rule as follows:

**2 CSR 80-3.060** The Examination of Milk and Milk Products  
**is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1298). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE**  
**Division 80—State Milk Board**  
**Chapter 3—Production and Distribution of Grade “A”**  
**Retail Raw Milk and Milk Products**

**ORDER OF RULEMAKING**

By the authority vested in the State Milk Board under section 196.939, RSMo 2000, the board amends a rule as follows:

**2 CSR 80-3.070** The Grading of Milk and Milk Products  
**is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1298–1300). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE**  
**Division 80—State Milk Board**  
**Chapter 3—Production and Distribution of Grade “A”**  
**Retail Raw Milk and Milk Products**

**ORDER OF RULEMAKING**

By the authority vested in the State Milk Board under section

196.939, RSMo 2000, the board amends a rule as follows:

**2 CSR 80-3.080** Suspension and Reinstatement of Permit  
**is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1300). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE**  
**Division 80—State Milk Board**  
**Chapter 3—Production and Distribution of Grade “A”**  
**Retail Raw Milk and Milk Products**

**ORDER OF RULEMAKING**

By the authority vested in the State Milk Board under section 196.939, RSMo 2000, the board amends a rule as follows:

**2 CSR 80-3.090** Transferring or Dipping Milk: Delivery  
Containers; Cooling; Quarantined Residences **is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1300). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE**  
**Division 80—State Milk Board**  
**Chapter 3—Production and Distribution of Grade “A”**  
**Retail Raw Milk and Milk Products**

**ORDER OF RULEMAKING**

By the authority vested in the State Milk Board under section 196.939, RSMo 2000, the board amends a rule as follows:

**2 CSR 80-3.100** Notification of Disease **is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1301). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE**  
**Division 80—State Milk Board**  
**Chapter 3—Production and Distribution of Grade “A”**  
**Retail Raw Milk and Milk Products**

**ORDER OF RULEMAKING**

By the authority vested in the State Milk Board under section 196.939, RSMo 2000, the board amends a rule as follows:

**2 CSR 80-3.110 Procedure When Infection is Suspected  
is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1301). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 80—State Milk Board  
Chapter 3—Production and Distribution of Grade “A”  
Retail Raw Milk and Milk Products**

**ORDER OF RULEMAKING**

By the authority vested in the State Milk Board under section 196.939, RSMo 2000, the board amends a rule as follows:

**2 CSR 80-3.120 Enforcement Interpretation is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1301). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 80—State Milk Board  
Chapter 3—Production and Distribution of Grade “A”  
Retail Raw Milk and Milk Products**

**ORDER OF RULEMAKING**

By the authority vested in the State Milk Board under section 196.939, RSMo 2000, the board amends a rule as follows:

**2 CSR 80-3.130 Adoption of the *Grade “A” Pasteurized Milk Ordinance* (PMO), 2011 Revision of the United States Department of Health and Human Services, Public Health Service, Food and Drug Administration by Reference is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1302). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 80—State Milk Board  
Chapter 6—Requirements for the Missouri Dairy Law**

**ORDER OF RULEMAKING**

By the authority vested in the State Milk Board under section 196.540, RSMo 2000, the board amends a rule as follows:

**2 CSR 80-6.011 Specifications for the Construction and Operations of Facilities and Installation of Equipment for the Production and Processing of Manufacturing Milk and Milk Products is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1302–1303). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 80—State Milk Board  
Chapter 6—Requirements for the Missouri Dairy Law**

**ORDER OF RULEMAKING**

By the authority vested in the State Milk Board under section 196.540, RSMo 2000, the board amends a rule as follows:

**2 CSR 80-6.021 Protection and Transportation of Raw Milk and Cream is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1303). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 80—State Milk Board  
Chapter 6—Requirements for the Missouri Dairy Law**

**ORDER OF RULEMAKING**

By the authority vested in the State Milk Board under section 196.540, RSMo 2000, the board amends a rule as follows:

**2 CSR 80-6.041 Dairy Manufacturing Plant, Dairy Manufacturing Farm, and Personnel Licensure is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1303–1304). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 90—Weights and Measures  
Chapter 10—Liquefied Petroleum Gases**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Propane Gas Commission under section 323.020, RSMo Supp. 2012, the commission amends a rule as follows:



**2 CSR 90-10.001 Definitions and General Provisions is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2012 (37 MoReg 1143). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 90—Weights and Measures  
Chapter 10—Liquefied Petroleum Gases**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Propane Gas Commission under section 323.020, RSMo Supp. 2012, the commission amends a rule as follows:

**2 CSR 90-10.011 Inspection Authority—Duties is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2012 (37 MoReg 1143). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 90—Weights and Measures  
Chapter 10—Liquefied Petroleum Gases**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Propane Gas Commission under section 323.020, RSMo Supp. 2012, the commission amends a rule as follows:

**2 CSR 90-10.012 Registration—Training is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2012 (37 MoReg 1144). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 90—Weights and Measures  
Chapter 10—Liquefied Petroleum Gases**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Propane Gas Commission under section 323.020, RSMo Supp. 2012, the commission amends a rule as follows:

2 CSR 90-10.013 is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2012 (37 MoReg 1144–1145). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: The commission received written comments from five (5) entities on the proposed amendment, all which were duplicated or echoed and involved the same subsection. Consequently, these comments have been consolidated into one (1) central comment which are addressed below.

COMMENT #1: Balloon Federation of America, LTA Services LLC, Show-Me Balloon Club, The Great Forest Park Balloon Race, Inc, and Green Hills Ballooning, Inc opposed the elimination of the exception for cylinders utilized in hot air balloon service.

RESPONSE: The commission removed the requirement that cylinders under one hundred pounds (100 lbs) be filled by weight and that the cylinders can not be filled from a delivery truck.

**2 CSR 90-10.013 Installation Requirements**

(8) All LP gas and autogas dispensers shall have recommended fill procedures posted.

(A) All dispensers in the retail business of refilling cylinders shall be equipped with a state-approved scale to be utilized for the safe filling of LP gas cylinders.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 90—Weights and Measures  
Chapter 10—Liquefied Petroleum Gases**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Propane Gas Commission under section 323.020, RSMo Supp. 2012, the commission amends a rule as follows:

**2 CSR 90-10.014 Storage is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2012 (37 MoReg 1145–1148). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 90—Weights and Measures  
Chapter 10—Liquefied Petroleum Gases**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Propane Gas Commission under section 323.020, RSMo Supp. 2012, the commission amends a rule as follows:

**2 CSR 90-10.020 NFPA Manual No. 54, *National Fuel Gas Code* is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2012 (37 MoReg 1148). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed

amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 90—Weights and Measures  
Chapter 10—Liquefied Petroleum Gases**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Propane Gas Commission under section 323.020, RSMo Supp. 2012, the commission amends a rule as follows:

**2 CSR 90-10.040** NFPA Manual No. 58, *Storage and Handling of Liquefied Petroleum Gases* is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2012, (37 MoReg 1148). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 90—Weights and Measures  
Chapter 10—Liquefied Petroleum Gases**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Propane Gas Commission under section 323.020, RSMo Supp. 2012, the commission amends a rule as follows:

**2 CSR 90-10.090** NFPA Manual No. 1192, Chapter 5, *Standard on Recreational Vehicles* is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2012 (37 MoReg 1148-1149). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 2—DEPARTMENT OF AGRICULTURE  
Division 90—Weights and Measures  
Chapter 10—Liquefied Petroleum Gases**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Propane Gas Commission under section 323.020, RSMo Supp. 2012, the commission amends a rule as follows:

**2 CSR 90-10.120** Reporting of Odorized LP Gas Release, Fire, or Explosion is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2012 (37 MoReg 1149). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed

amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 13—DEPARTMENT OF SOCIAL SERVICES  
Division 70—MO HealthNet Division  
Chapter 10—Nursing Home Program**

**ORDER OF RULEMAKING**

By the authority vested in the MO HealthNet Division under section 208.159, RSMo 2000, and sections 208.153 and 208.201, RSMo Supp. 2012, the division amends a rule as follows:

**13 CSR 70-10.016** Global Per Diem Adjustments to Nursing Facility and HIV Nursing Facility Reimbursement Rates is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2012 (37 MoReg 1164-1166). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 13—DEPARTMENT OF SOCIAL SERVICES  
Division 70—MO HealthNet Division  
Chapter 10—Nursing Home Program**

**ORDER OF RULEMAKING**

By the authority vested in the MO HealthNet Division under sections 198.401, 198.403, 198.406, 198.409, 198.412, 198.416, 198.418, 198.421, 198.424, 198.427, 198.431, 198.433, 198.436, and 208.159, RSMo 2000, and sections 198.439, 208.153, and 208.201, RSMo Supp. 2012, the division amends a rule as follows:

**13 CSR 70-10.110** Nursing Facility Reimbursement Allowance is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2012 (37 MoReg 1167-1171). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 13—DEPARTMENT OF SOCIAL SERVICES  
Division 70—MO HealthNet Division  
Chapter 15—Hospital Program**

**ORDER OF RULEMAKING**

By the authority vested in the MO HealthNet Division under sections 208.152, 208.153, and 208.201, RSMo Supp. 2012, the division amends a rule as follows:

**13 CSR 70-15.010** Inpatient Hospital Services Reimbursement Plan; Outpatient Hospital Services Reimbursement Methodology is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2012 (37 MoReg 1172–1173). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 13—DEPARTMENT OF SOCIAL SERVICES**  
**Division 70—MO HealthNet Division**  
**Chapter 15—Hospital Program**

**ORDER OF RULEMAKING**

By the authority vested in the MO HealthNet Division under sections 208.201 and 208.453, RSMo Supp. 2012, and section 208.455, RSMo 2000, the division amends a rule as follows:

**13 CSR 70-15.110** Federal Reimbursement Allowance (FRA)  
**is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2012 (37 MoReg 1174–1177). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 13—DEPARTMENT OF SOCIAL SERVICES**  
**Division 70—MO HealthNet Division**  
**Chapter 15—Hospital Program**

**ORDER OF RULEMAKING**

By the authority vested in the MO HealthNet Division under sections 208.152, 208.153, and 208.201, RSMo Supp. 2012, the division amends a rule as follows:

**13 CSR 70-15.160** Prospective Outpatient Hospital Services  
Reimbursement Methodology **is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on August 1, 2012 (37 MoReg 1178–1180). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: The MO HealthNet Division (MHD) received the same comment from two (2) interested parties.

COMMENT: The two (2) parties are Timothy P. Wolters, Director of Reimbursement for Citizens Memorial Healthcare and Dan Probstfield, Senior Vice President and CFO of Lake Regional Health System. The two (2) parties commented on the same issue stating that the proposed amendment overlooks other rural hospitals with special designations recognized by the federal government (i.e., rural referral centers, sole community hospitals, and Medicare-dependent hospitals). Commenters stated that these facilities are as vital to the delivery of health care in rural communities as the critical access hospitals and deserve equal treatment under the Missouri Medicaid plan. RESPONSE: The MO HealthNet Division appreciates the comments but does not believe a change is warranted. No changes have been

made to the rule as a result of these comments.

**Title 20—DEPARTMENT OF INSURANCE,**  
**FINANCIAL INSTITUTIONS AND PROFESSIONAL**  
**REGISTRATION**

**Division 2010—Missouri State Board of Accountancy**  
**Chapter 2—General Rules**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri State Board of Accountancy under sections 326.262 and 326.280, RSMo Supp. 2012, the board amends a rule as follows:

**20 CSR 2010-2.061** Requirements for an Initial License to  
Practice **is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1304–1306). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,**  
**FINANCIAL INSTITUTIONS AND PROFESSIONAL**  
**REGISTRATION**

**Division 2010—Missouri State Board of Accountancy**  
**Chapter 4—Continuing Education Requirements**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri State Board of Accountancy under section 326.271, RSMo Supp. 2012, the board amends a rule as follows:

**20 CSR 2010-4.010** Effective Dates and Basic Requirements  
**is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1307). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,**  
**FINANCIAL INSTITUTIONS AND PROFESSIONAL**  
**REGISTRATION**

**Division 2030—Missouri Board for Architects,**  
**Professional Engineers, Professional Land Surveyors,**  
**and Landscape Architects**  
**Chapter 4—Applications**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Board for Architects, Professional Engineers, Professional Land Surveyors, and Landscape Architects under section 324.008.1., RSMo Supp. 2012, the board adopts a rule as follows:

**20 CSR 2030-4.055** Criteria to File Application under section 324.008.1., RSMo, for a Temporary Courtesy License is adopted.

A notice of proposed rulemaking containing the text of the proposed rule was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1307–1311). No changes have been made in the text of the proposed rule, so it is not reprinted here. This proposed rule becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION  
Division 2030—Missouri Board for Architects,  
Professional Engineers, Professional Land Surveyors,  
and Landscape Architects  
Chapter 6—Fees**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Board for Architects, Professional Engineers, Professional Land Surveyors, and Landscape Architects under sections 324.008 and 327.041, RSMo Supp. 2012, the board amends a rule as follows:

**20 CSR 2030-6.015** Application, Renewal, Reinstatement, Relicensure, and Miscellaneous Fees is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1312–1315). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION  
Division 2030—Missouri Board for Architects,  
Professional Engineers, Professional Land Surveyors,  
and Landscape Architects  
Chapter 11—Renewals**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Board for Architects, Professional Engineers, Professional Land Surveyors, and Landscape Architects under sections 327.031 and 327.041, RSMo Supp. 2012, and section 327.261, RSMo 2000, the board amends a rule as follows:

**20 CSR 2030-11.015** Continuing Professional Competency for Professional Engineers is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1316–1317). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION  
Division 2231—Division of Professional Registration  
Chapter 1—Organization and Description of Division**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Division of Professional Registration under section 536.023(3), RSMo Supp. 2012, the board amends a rule as follows:

**20 CSR 2231-1.010** General Organization is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1357). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION  
Division 2231—Division of Professional Registration  
Chapter 2—Designation of License Renewal Dates and  
Related Renewal Information**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Division of Professional Registration under section 324.001, RSMo Supp. 2012, the board amends a rule as follows:

**20 CSR 2231-2.010** Designation of License Renewal Dates and Related Renewal Information is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1357–1358). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**Title 20—DEPARTMENT OF INSURANCE,  
FINANCIAL INSTITUTIONS AND PROFESSIONAL  
REGISTRATION  
Division 2250—Missouri Real Estate Commission  
Chapter 2—General Rules**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Real Estate Commission under sections 339.100.3., 339.120, and 339.205, RSMo Supp. 2012, the commission amends a rule as follows:

**20 CSR 2250-2.040** Disputes is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on September 4, 2012 (37 MoReg 1358). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

**ADDITION TO STATUTORY LIST OF CONTRACTORS  
BARRED FROM PUBLIC WORKS PROJECTS**

The following is an addition to the list of contractor(s) who have been prosecuted and convicted of violating the Missouri Prevailing Wage Law, and whose Notice of Conviction has been filed with the Secretary of State pursuant to Section 290.330, RSMo. Under this statute, no public body is permitted to award a contract, directly or indirectly, for public works (1) to Mr. Larry G. McElroy, (2) to any other contractor or subcontractor that is owned, operated or controlled by Mr. Larry G. McElroy including Blackhawk or (3) to any other simulation of Mr. Larry G. McElroy or of Blackhawk Electric for a period of one year, or until December 27, 2012.

<u>Name of Contractor</u>	<u>Name of Officers</u>	<u>Address</u>	<u>Date of Conviction</u>	<u>Debarment Period</u>
Larry G. McElroy DBA Blackhawk Electric Case No. 11CG-CR01157 Cape Girardeau County Cir. Ct.		254 E. Lake Dr., PO Box 248 Cape Girardeau, MO 63701	12/27/2011	12/27/2011-12/27/2012

Dated this 26 day of January, 2012.

  
Carla Buschjost, Director

# **ADDITION TO STATUTORY LIST OF CONTRACTORS BARRED FROM PUBLIC WORKS PROJECTS**

The following is an addition to the list of contractor(s) who have been prosecuted and convicted of violating the Missouri Prevailing Wage Law, and whose Notice of Conviction has been filed with the Secretary of State pursuant to Section 290.330, RSMo. Under this statute, no public body is permitted to award a contract, directly or indirectly, for public works (1) to Mr. Norman Bass, (2) to any other contractor or subcontractor that is owned, operated or controlled by Mr. Norman Bass including Municipal Construction Incorporated or (3) to any other simulation of Mr. Norman Bass or of Municipal Construction Incorporated for a period of one year, or until February 1, 2013.

<u>Name of Contractor</u>	<u>Name of Officers</u>	<u>Address</u>	<u>Date of Conviction</u>	<u>Debarment Period</u>
Norman Bass DBA Municipal Construction Incorporated Case No. 12SO-CR00103 Scott County Cir. Ct.		10150 Hawthorne Ridge Goodrich, MI 48438	2/01/12	2/01/2012-2/01/2013

Dated this 17 day of February, 2012.

  
Carla Buschjost, Director

**T**he Secretary of State is required by sections 347.141 and 359.481, RSMo 2000, to publish dissolutions of limited liability companies and limited partnerships. The content requirements for the one-time publishing of these notices are prescribed by statute. This listing is published pursuant to these statutes. We request that documents submitted for publication in this section be submitted in camera ready 8 1/2" x 11" manuscript by email to [dissolutions@sos.mo.gov](mailto:dissolutions@sos.mo.gov).

**NOTICE OF DISSOLUTION AND REQUEST FOR CLAIMS**  
**TO ALL CREDITORS AND CLAIMANTS AGAINST**  
**MEDICAL PARK ASSOCIATES "A",**  
**A MISSOURI LIMITED PARTNERSHIP**

Notice is hereby given that the general and limited partners of Medical Park Associates "A", a Missouri Limited Partnership (the "Limited Partnership"), have approved a proposal that the Limited Partnership voluntarily dissolve and that the general partner of the Limited Partnership is now engaged in winding up proceedings so that its existence shall be ended.

All persons with claims against the Limited Partnership must present their claims to the Limited Partnership in writing, setting forth the name and mailing address of the claimant, and the nature, substance and amount of the claim.

Such claims must be mailed to Medical Park Associates "A", a Missouri Limited Partnership, Attn: Kevin Trimble, Saint Luke's Northland Hospital Corporation, 5830 NW Barry Road, Kansas City MO 64154. Any claim against the Limited Partnership must be commenced within three years after publication of this notice. Claims not received by the Limited Partnership within three years after publication of this notice, as stated in the preceding sentence, will be barred.

**NOTICE OF DISSOLUTION OF LIMITED LIABILITY COMPANY**  
**TO ALL CREDITORS OF AND CLAIMANTS AGAINST SILVER FOX, LLC**

On October 30, 2012, Silver Fox, LLC, filed Notice of Winding Up for Limited Liability Company with the Missouri Secretary of State. Claims against Silver Fox, LLC, must be submitted to Rick J. Muenks, Attorney at Law, 3041 S. Kimbrough Avenue, Ste. 106, Springfield, Missouri 65807. Claims must include name and address of claimant; amount of claim; basis of claim; and documentation of claim. By law, proceedings are barred unless commenced against the LLC within three years after the publication of this notice.



**NOTICE OF DISSOLUTION OF CORPORATION**

**NOTICE OF DISSOLUTION TO ALL CREDITORS OF AND CLAIMANTS  
AGAINST SPELMAN DEVELOPMENT CORP., a Missouri corporation.**

On November 5, 2012, Spelman Development Corp. ("Corporation"), a Missouri corporation, filed its Articles of Dissolution with the Missouri Secretary of State. Dissolution is effective as of November 5, 2012.

Spelman Development Corp. requests that all persons and organizations with claims against it present them immediately by letter to the Corporation at Saint Luke's Northland Hospital Corporation, 5830 N.W. Barry Road, Kansas City, MO 64154, Attention: Kevin Trimble.

All claims must include: the name and address of the claimant; the amount claimed; the basis for the claim; and the date(s) on which the event(s) on which the claim is based occurred.

Because of the dissolution of Spelman Development Corp., any claims against it will be barred unless a proceeding to enforce the claim is commenced within two (2) years after the publication date of this notice.

KEVIN TRIMBLE, President

# Rule Changes Since Update to Code of State Regulations

This cumulative table gives you the latest status of rules. It contains citations of rulemakings adopted or proposed after deadline for the monthly Update Service to the *Code of State Regulations*, citations are to volume and page number in the *Missouri Register*, except for material in this issue. The first number in the table cite refers to the volume number or the publication year—30 (2005) and 31 (2006). MoReg refers to *Missouri Register* and the numbers refer to a specific *Register* page, R indicates a rescission, W indicates a withdrawal, S indicates a statement of actual cost, T indicates an order terminating a rule, N.A. indicates not applicable, RAN indicates a rule action notice, RUC indicates a rule under consideration, and F indicates future effective date.

Rule Number	Agency	Emergency	Proposed	Order	In Addition
1 CSR 10	<b>OFFICE OF ADMINISTRATION</b> State Officials' Salary Compensation Schedule				37 MoReg 1859
2 CSR 30-2.020	<b>DEPARTMENT OF AGRICULTURE</b> Animal Health		37 MoReg 907	37 MoReg 1609W	
		37 MoReg 1699	37 MoReg 1762		
2 CSR 70-10.025	Plant Industries		37 MoReg 1141		
2 CSR 70-10.075	Plant Industries		37 MoReg 1141		
2 CSR 70-11.070	Plant Industries	37 MoReg 1637	37 MoReg 1640		
2 CSR 80-3.010	State Milk Board		37 MoReg 1296	This Issue	
2 CSR 80-3.020	State Milk Board		37 MoReg 1296	This Issue	
2 CSR 80-3.030	State Milk Board		37 MoReg 1297	This Issue	
2 CSR 80-3.040	State Milk Board		37 MoReg 1297	This Issue	
2 CSR 80-3.050	State Milk Board		37 MoReg 1297	This Issue	
2 CSR 80-3.060	State Milk Board		37 MoReg 1298	This Issue	
2 CSR 80-3.070	State Milk Board		37 MoReg 1298	This Issue	
2 CSR 80-3.080	State Milk Board		37 MoReg 1300	This Issue	
2 CSR 80-3.090	State Milk Board		37 MoReg 1300	This Issue	
2 CSR 80-3.100	State Milk Board		37 MoReg 1301	This Issue	
2 CSR 80-3.110	State Milk Board		37 MoReg 1301	This Issue	
2 CSR 80-3.120	State Milk Board		37 MoReg 1301	This Issue	
2 CSR 80-3.130	State Milk Board		37 MoReg 1302	This Issue	
2 CSR 80-5.010	State Milk Board		37 MoReg 1089	37 MoReg 1609	
2 CSR 80-6.011	State Milk Board		37 MoReg 1302	This Issue	
2 CSR 80-6.021	State Milk Board		37 MoReg 1303	This Issue	
2 CSR 80-6.041	State Milk Board		37 MoReg 1303	This Issue	
2 CSR 90-10	Weights and Measures				37 MoReg 1197
2 CSR 90-10.001	Weights and Measures		37 MoReg 1143	This Issue	
2 CSR 90-10.011	Weights and Measures		37 MoReg 1143	This Issue	
2 CSR 90-10.012	Weights and Measures		37 MoReg 1144	This Issue	
2 CSR 90-10.013	Weights and Measures		37 MoReg 1144	This Issue	
2 CSR 90-10.014	Weights and Measures		37 MoReg 1145	This Issue	
2 CSR 90-10.020	Weights and Measures		37 MoReg 1148	This Issue	
2 CSR 90-10.040	Weights and Measures		37 MoReg 1148	This Issue	
2 CSR 90-10.090	Weights and Measures		37 MoReg 1148	This Issue	
2 CSR 90-10.120	Weights and Measures		37 MoReg 1149	This Issue	
3 CSR 10-4.117	<b>DEPARTMENT OF CONSERVATION</b> Conservation Commission		37 MoReg 1562		
3 CSR 10-5.205	Conservation Commission		37 MoReg 1562		
3 CSR 10-6.415	Conservation Commission		37 MoReg 1563		
3 CSR 10-6.545	Conservation Commission		37 MoReg 1563		
3 CSR 10-8.510	Conservation Commission		37 MoReg 1393	37 MoReg 1858	
3 CSR 10-9.110	Conservation Commission		37 MoReg 1563		
3 CSR 10-9.350	Conservation Commission		37 MoReg 1449		
3 CSR 10-9.560	Conservation Commission		37 MoReg 1449		
3 CSR 10-11.180	Conservation Commission		37 MoReg 1564		
3 CSR 10-11.200	Conservation Commission		37 MoReg 1565		
3 CSR 10-11.205	Conservation Commission		37 MoReg 1566		
3 CSR 10-11.210	Conservation Commission		37 MoReg 1566		
3 CSR 10-11.215	Conservation Commission		37 MoReg 1567		
3 CSR 10-12.110	Conservation Commission		37 MoReg 1567		
3 CSR 10-12.115	Conservation Commission		37 MoReg 1568		
3 CSR 10-12.125	Conservation Commission		37 MoReg 1568		
3 CSR 10-12.140	Conservation Commission		37 MoReg 1569		
3 CSR 10-12.145	Conservation Commission		37 MoReg 1570		
4 CSR 240-31.010	<b>DEPARTMENT OF ECONOMIC DEVELOPMENT</b> Public Service Commission	37 MoReg 1003	37 MoReg 1007	37 MoReg 1649	
5 CSR 20-100.255	<b>DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION</b> Division of Learning Services		37 MoReg 1571		
5 CSR 20-200.280	Division of Learning Services		37 MoReg 1766		
5 CSR 20-400.280	Division of Learning Services		37 MoReg 1643		
5 CSR 20-400.310	Division of Learning Services		37 MoReg 1450		
5 CSR 20-400.340	Division of Learning Services		37 MoReg 1453R		
5 CSR 20-400.350	Division of Learning Services		37 MoReg 1453R		
5 CSR 20-400.420	Division of Learning Services		37 MoReg 1453R		
5 CSR 20-400.440	Division of Learning Services		37 MoReg 1453		
5 CSR 20-500.330	Division of Learning Services		37 MoReg 908	37 MoReg 1609	

Rule Number	Agency	Emergency	Proposed	Order	In Addition
5 CSR 20-600.130	Division of Learning Services		37 MoReg 1457		
5 CSR 30-261.025	Division of Financial and Administrative Services		37 MoReg 912	37 MoReg 1609	
<b>DEPARTMENT OF HIGHER EDUCATION</b>					
6 CSR 10-5.010	Commissioner of Higher Education		37 MoReg 1522		
<b>DEPARTMENT OF TRANSPORTATION</b>					
7 CSR 10-25.010	Missouri Highways and Transportation Commission				37 MoReg 1652
<b>DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS</b>					
8 CSR 30-3.060	Division of Labor Standards		37 MoReg 1393		
<b>DEPARTMENT OF NATURAL RESOURCES</b>					
10 CSR 10-1.010	Air Conservation Commission		37 MoReg 1646		
10 CSR 10-2.330	Air Conservation Commission		37 MoReg 1769		
10 CSR 10-5.381	Air Conservation Commission		37 MoReg 955	37 MoReg 1610	
10 CSR 10-6.020	Air Conservation Commission		37 MoReg 1222		
10 CSR 10-6.070	Air Conservation Commission		37 MoReg 966	37 MoReg 1610	
10 CSR 10-6.075	Air Conservation Commission		37 MoReg 968	37 MoReg 1610	
10 CSR 10-6.080	Air Conservation Commission		37 MoReg 971	37 MoReg 1611	
10 CSR 10-6.191	Air Conservation Commission		37 MoReg 1460		
10 CSR 10-6.368	Air Conservation Commission		37 MoReg 1460R		
10 CSR 100-2.010	Petroleum Storage Tank Insurance Fund Board of Trustees		37 MoReg 1395		
10 CSR 100-4.010	Petroleum Storage Tank Insurance Fund Board of Trustees		37 MoReg 1395		
10 CSR 100-4.020	Petroleum Storage Tank Insurance Fund Board of Trustees		37 MoReg 1397		
10 CSR 140-2	Division of Energy				37 MoReg 1062
<b>DEPARTMENT OF PUBLIC SAFETY</b>					
11 CSR 45-4.050	Missouri Gaming Commission		37 MoReg 1461R		
11 CSR 45-4.055	Missouri Gaming Commission		37 MoReg 1461		
11 CSR 45-4.190	Missouri Gaming Commission		37 MoReg 1462		
11 CSR 45-4.205	Missouri Gaming Commission		37 MoReg 1462		
11 CSR 45-4.240	Missouri Gaming Commission		37 MoReg 1462		
11 CSR 45-4.250	Missouri Gaming Commission		37 MoReg 1463		
11 CSR 45-4.260	Missouri Gaming Commission		37 MoReg 1463		
11 CSR 45-4.380	Missouri Gaming Commission		37 MoReg 1463		
11 CSR 45-4.390	Missouri Gaming Commission		37 MoReg 1464		
11 CSR 45-5.184	Missouri Gaming Commission		37 MoReg 1464		
11 CSR 45-5.193	Missouri Gaming Commission		37 MoReg 1583		
11 CSR 45-8.130	Missouri Gaming Commission		37 MoReg 1466		
11 CSR 45-9.020	Missouri Gaming Commission		37 MoReg 912	37 MoReg 1611	
11 CSR 45-9.105	Missouri Gaming Commission		37 MoReg 1583		
11 CSR 45-9.106	Missouri Gaming Commission		37 MoReg 1770		
11 CSR 45-9.118	Missouri Gaming Commission		37 MoReg 1587		
11 CSR 45-9.120	Missouri Gaming Commission		37 MoReg 1770		
11 CSR 50-3.010	Missouri State Highway Patrol (Changed from 11 CSR 80-1.010)		37 MoReg 1467		
11 CSR 50-3.020	Missouri State Highway Patrol (Changed from 11 CSR 80-2.010)		37 MoReg 1467		
11 CSR 50-3.030	Missouri State Highway Patrol (Changed from 11 CSR 80-3.010)		37 MoReg 1468		
11 CSR 50-3.040	Missouri State Highway Patrol (Changed from 11 CSR 80-4.010)		37 MoReg 1468		
11 CSR 50-3.050	Missouri State Highway Patrol (Changed from 11 CSR 80-7.010)		37 MoReg 1468		
11 CSR 50-3.060	Missouri State Highway Patrol (Changed from 11 CSR 80-5.010)		37 MoReg 1469		
11 CSR 50-3.070	Missouri State Highway Patrol (Changed from 11 CSR 80-6.010)		37 MoReg 1470		
11 CSR 50-3.080	Missouri State Highway Patrol (Changed from 11 CSR 80-8.010)		37 MoReg 1471		
11 CSR 50-3.090	Missouri State Highway Patrol (Changed from 11 CSR 80-9.010)		37 MoReg 1471		
11 CSR 50-3.100	Missouri State Highway Patrol	37 MoReg 1439	37 MoReg 1472		
11 CSR 80-1.010	Missouri State Water Patrol (Changed to 11 CSR 50-3.010)		37 MoReg 1467		
11 CSR 80-2.010	Missouri State Water Patrol (Changed to 11 CSR 50-3.020)		37 MoReg 1467		
11 CSR 80-3.010	Missouri State Water Patrol (Changed to 11 CSR 50-3.030)		37 MoReg 1468		
11 CSR 80-4.010	Missouri State Water Patrol (Changed to 11 CSR 50-3.040)		37 MoReg 1468		
11 CSR 80-5.010	Missouri State Water Patrol (Changed to 11 CSR 50-3.060)		37 MoReg 1469		
11 CSR 80-6.010	Missouri State Water Patrol (Changed to 11 CSR 50-3.070)		37 MoReg 1470		

Rule Number	Agency	Emergency	Proposed	Order	In Addition
11 CSR 80-7.010	Missouri State Water Patrol ( <i>Changed to 11 CSR 50-3.050</i> )		37 MoReg 1468		
11 CSR 80-8.010	Missouri State Water Patrol ( <i>Changed to 11 CSR 50-3.080</i> )		37 MoReg 1471		
11 CSR 80-9.010	Missouri State Water Patrol ( <i>Changed to 11 CSR 50-3.090</i> )		37 MoReg 1471		
11 CSR 80-9.020	Missouri State Water Patrol		37 MoReg 1472R		
<b>DEPARTMENT OF REVENUE</b>					
12 CSR 10-24.462	Director of Revenue		37 MoReg 1533R		
12 CSR 10-41.010	Director of Revenue	37 MoReg 1701	37 MoReg 1770		
12 CSR 30-2.015	State Tax Commission		37 MoReg 1473		
12 CSR 30-3.010	State Tax Commission		37 MoReg 1473		
12 CSR 30-3.065	State Tax Commission		37 MoReg 1473		
<b>DEPARTMENT OF SOCIAL SERVICES</b>					
13 CSR 35-100.010	Children's Division		37 MoReg 1587		
13 CSR 35-100.030	Children's Division		37 MoReg 1592		
13 CSR 40-2.400	Family Support Division		37 MoReg 1149		
13 CSR 40-2.410	Family Support Division		37 MoReg 1150		
13 CSR 40-2.420	Family Support Division		37 MoReg 1154		
13 CSR 40-2.430	Family Support Division		37 MoReg 1157		
13 CSR 40-2.440	Family Support Division		37 MoReg 1159		
13 CSR 40-2.450	Family Support Division		37 MoReg 1163		
13 CSR 70-10.016	MO HealthNet Division		37 MoReg 1164	This Issue	
13 CSR 70-10.110	MO HealthNet Division	37 MoReg 1131	37 MoReg 1167	This Issue	
13 CSR 70-15.010	MO HealthNet Division	37 MoReg 1131	37 MoReg 1172	This Issue	
13 CSR 70-15.110	MO HealthNet Division	37 MoReg 1132	37 MoReg 1174	This Issue	
13 CSR 70-15.160	MO HealthNet Division	37 MoReg 1134	37 MoReg 1178	This Issue	
13 CSR 70-15.220	MO HealthNet Division	37 MoReg 1135	37 MoReg 681	37 MoReg 1365	
<b>ELECTED OFFICIALS</b>					
15 CSR 50-4.030	Treasurer	37 MoReg 731	37 MoReg 733	37 MoReg 1407	
<b>RETIREMENT SYSTEMS</b>					
16 CSR 10-3.010	The Public School Retirement System of Missouri		37 MoReg 1774		
16 CSR 10-4.012	The Public School Retirement System of Missouri		37 MoReg 1181	37 MoReg 1650	
16 CSR 10-5.010	The Public School Retirement System of Missouri		37 MoReg 1181	37 MoReg 1650	
16 CSR 10-6.020	The Public School Retirement System of Missouri		37 MoReg 1774		
16 CSR 10-6.045	The Public School Retirement System of Missouri		37 MoReg 1181	37 MoReg 1650	
16 CSR 10-6.060	The Public School Retirement System of Missouri		37 MoReg 1182	37 MoReg 1650	
16 CSR 20-2.048	Missouri Local Government Employees' Retirement System (LAGERS)		37 MoReg 1533		
16 CSR 50-2.120	The County Employees' Retirement Fund		37 MoReg 1533		
16 CSR 50-10.030	The County Employees' Retirement Fund		37 MoReg 1534		
16 CSR 50-10.050	The County Employees' Retirement Fund		37 MoReg 1534		
16 CSR 50-10.080	The County Employees' Retirement Fund		37 MoReg 1535		
16 CSR 50-10.090	The County Employees' Retirement Fund		37 MoReg 1535		
16 CSR 50-20.120	The County Employees' Retirement Fund		37 MoReg 1535		
<b>DEPARTMENT OF HEALTH AND SENIOR SERVICES</b>					
19 CSR 25-30.011	State Public Health Laboratory		37 MoReg 1009	37 MoReg 1611	
19 CSR 25-30.021	State Public Health Laboratory		37 MoReg 1010	37 MoReg 1612	
19 CSR 25-30.031	State Public Health Laboratory		37 MoReg 1015	37 MoReg 1612	
19 CSR 25-30.041	State Public Health Laboratory		37 MoReg 1024	37 MoReg 1612	
19 CSR 25-30.050	State Public Health Laboratory		37 MoReg 1027	37 MoReg 1613	
19 CSR 25-30.051	State Public Health Laboratory		37 MoReg 1027	37 MoReg 1613	
19 CSR 25-30.060	State Public Health Laboratory		37 MoReg 1030	37 MoReg 1613	
19 CSR 25-30.070	State Public Health Laboratory		37 MoReg 1040	37 MoReg 1614	
19 CSR 25-30.080	State Public Health Laboratory		37 MoReg 1040	37 MoReg 1614	
19 CSR 30-40.710	Division of Regulation and Licensure		This Issue		
19 CSR 30-40.720	Division of Regulation and Licensure		This Issue		
19 CSR 30-40.730	Division of Regulation and Licensure		This Issue		
19 CSR 30-40.740	Division of Regulation and Licensure		This Issue		
19 CSR 30-40.750	Division of Regulation and Licensure		This Issue		
19 CSR 30-40.760	Division of Regulation and Licensure		This Issue		
19 CSR 30-40.770	Division of Regulation and Licensure		This Issue		
19 CSR 30-40.780	Division of Regulation and Licensure		This Issue		
19 CSR 30-40.790	Division of Regulation and Licensure		This Issue		
19 CSR 30-86.022	Division of Regulation and Licensure		37 MoReg 592	37 MoReg 1411	37 MoReg 1538
19 CSR 60-50	Missouri Health Facilities Review Committee				37 MoReg 1653
					37 MoReg 1862
<b>DEPARTMENT OF INSURANCE, FINANCIAL INSTITUTIONS AND PROFESSIONAL REGISTRATION</b>					
20 CSR	Applied Behavior Analysis Maximum Benefit				37 MoReg 472

Rule Number	Agency	Emergency	Proposed	Order	In Addition
20 CSR	Construction Claims Binding Arbitration Cap				36 MoReg 192 37 MoReg 62
20 CSR	Sovereign Immunity Limits				37 MoReg 62
20 CSR	State Legal Expense Fund Cap				36 MoReg 192 37 MoReg 62
20 CSR 2010-2.005	Missouri State Board of Accountancy		37 MoReg 1399		
20 CSR 2010-2.061	Missouri State Board of Accountancy		37 MoReg 1304	This Issue	
20 CSR 2010-3.010	Missouri State Board of Accountancy		37 MoReg 1400		
20 CSR 2010-3.060	Missouri State Board of Accountancy		37 MoReg 1400		
20 CSR 2010-4.010	Missouri State Board of Accountancy		37 MoReg 1307	This Issue	
20 CSR 2010-5.070	Missouri State Board of Accountancy		37 MoReg 1400		
20 CSR 2030-4.055	Missouri Board for Architects, Professional Engineers, Professional Land Surveyors, and Landscape Architects		37 MoReg 1307	This Issue	
20 CSR 2030-6.015	Missouri Board for Architects, Professional Engineers, Professional Land Surveyors, and Landscape Architects		37 MoReg 1312	This Issue	
20 CSR 2030-11.015	Missouri Board for Architects, Professional Engineers, Professional Land Surveyors, and Landscape Architects		37 MoReg 1316	This Issue	
20 CSR 2110-2.120	Missouri Dental Board		37 MoReg 1318R 37 MoReg 1318		
20 CSR 2110-2.130	Missouri Dental Board		37 MoReg 1325		
20 CSR 2110-2.170	Missouri Dental Board	37 MoReg 1291	37 MoReg 1331		
20 CSR 2110-4.010	Missouri Dental Board		37 MoReg 1336R 37 MoReg 1336		
20 CSR 2110-4.020	Missouri Dental Board		37 MoReg 1338R 37 MoReg 1338		
20 CSR 2110-4.030	Missouri Dental Board		37 MoReg 1346		
20 CSR 2110-4.040	Missouri Dental Board		37 MoReg 1349		
20 CSR 2150-2.170	State Board of Registration for the Healing Arts		37 MoReg 1401		
20 CSR 2205-1.050	Missouri Board of Occupational Therapy		37 MoReg 1182	37 MoReg 1651	
20 CSR 2220-4.010	State Board of Pharmacy	37 MoReg 1221	37 MoReg 1244	37 MoReg 1858	
20 CSR 2220-6.100	State Board of Pharmacy		This Issue		
20 CSR 2231-1.010	Division of Professional Registration		37 MoReg 1357	This Issue	
20 CSR 2231-2.010	Division of Professional Registration		37 MoReg 1357	This Issue	
20 CSR 2245-1.010	Real Estate Appraisers		This Issue		
20 CSR 2245-2.010	Real Estate Appraisers		This Issue		
20 CSR 2245-3.001	Real Estate Appraisers		This Issue		
20 CSR 2245-3.005	Real Estate Appraisers		This Issue		
20 CSR 2245-3.010	Real Estate Appraisers		This Issue		
20 CSR 2245-4.050	Real Estate Appraisers		This Issue		
20 CSR 2245-5.020	Real Estate Appraisers		This Issue		
20 CSR 2245-6.016	Real Estate Appraisers		This Issue		
20 CSR 2245-10.010	Real Estate Appraisers		This Issue		
20 CSR 2245-10.020	Real Estate Appraisers		This Issue		
20 CSR 2245-10.030	Real Estate Appraisers		This Issue		
20 CSR 2245-10.040	Real Estate Appraisers		This Issue		
20 CSR 2250-2.040	Missouri Real Estate Commission		37 MoReg 1358	This Issue	
20 CSR 2263-1.040	State Committee for Social Workers	37 MoReg 1561	37 MoReg 1601		
20 CSR 2270-2.072	Missouri Veterinary Medical Board		37 MoReg 1605		
<b>MISSOURI CONSOLIDATED HEALTH CARE PLAN</b>					
22 CSR 10-2.010	Health Care Plan	37 MoReg 1701	37 MoReg 1774		
22 CSR 10-2.020	Health Care Plan	37 MoReg 1705R 37 MoReg 1705	37 MoReg 1778R 37 MoReg 1778		
22 CSR 10-2.030	Health Care Plan		37 MoReg 1790		
22 CSR 10-2.045	Health Care Plan	37 MoReg 1715	37 MoReg 1794		
22 CSR 10-2.051	Health Care Plan	37 MoReg 1716	37 MoReg 1795		
22 CSR 10-2.052	Health Care Plan	37 MoReg 1717	37 MoReg 1795		
22 CSR 10-2.053	Health Care Plan	37 MoReg 1717	37 MoReg 1796		
22 CSR 10-2.054	Health Care Plan		37 MoReg 1800		
22 CSR 10-2.055	Health Care Plan	37 MoReg 1719	37 MoReg 1800		
22 CSR 10-2.060	Health Care Plan	37 MoReg 1724	37 MoReg 1808		
22 CSR 10-2.070	Health Care Plan	37 MoReg 1726	37 MoReg 1809		
22 CSR 10-2.075	Health Care Plan	37 MoReg 1727	37 MoReg 1809		
22 CSR 10-2.080	Health Care Plan		37 MoReg 1812		
22 CSR 10-2.090	Health Care Plan	37 MoReg 1729	37 MoReg 1812		
22 CSR 10-2.091	Health Care Plan	37 MoReg 1732R	37 MoReg 1818R		
22 CSR 10-2.094	Health Care Plan	37 MoReg 1440	37 MoReg 1474		
22 CSR 10-2.110	Health Care Plan	37 MoReg 1441	37 MoReg 1477		
22 CSR 10-2.120	Health Care Plan	37 MoReg 1446	37 MoReg 1484		
22 CSR 10-2.130	Health Care Plan	37 MoReg 1732	37 MoReg 1818		
22 CSR 10-3.010	Health Care Plan	37 MoReg 1733	37 MoReg 1820		
22 CSR 10-3.020	Health Care Plan	37 MoReg 1736R 37 MoReg 1736	37 MoReg 1823R 37 MoReg 1823		
22 CSR 10-3.030	Health Care Plan		37 MoReg 1833		
22 CSR 10-3.045	Health Care Plan	37 MoReg 1743	37 MoReg 1834		
22 CSR 10-3.053	Health Care Plan	37 MoReg 1744	37 MoReg 1835		
22 CSR 10-3.054	Health Care Plan	37 MoReg 1745	37 MoReg 1836		
22 CSR 10-3.055	Health Care Plan	37 MoReg 1746	37 MoReg 1836		
22 CSR 10-3.056	Health Care Plan	37 MoReg 1747	37 MoReg 1837		
22 CSR 10-3.057	Health Care Plan	37 MoReg 1748	37 MoReg 1838		

Rule Number	Agency	Emergency	Proposed	Order	In Addition
22 CSR 10-3.060	Health Care Plan	37 MoReg 1754	37 MoReg 1846		
22 CSR 10-3.070	Health Care Plan	37 MoReg 1755	37 MoReg 1847		
22 CSR 10-3.075	Health Care Plan	37 MoReg 1756	37 MoReg 1847		
22 CSR 10-3.080	Health Care Plan		37 MoReg 1850		
22 CSR 10-3.090	Health Care Plan	37 MoReg 1758	37 MoReg 1850		
22 CSR 10-3.130	Health Care Plan	37 MoReg 1761	37 MoReg 1856		

# Emergency Rule Table

Agency	Publication	Effective	Expiration
<b>Department of Agriculture</b>			
<b>Animal Health</b>			
2 CSR 30-2.020	Movement of Livestock, Poultry, and Exotic Animals Within Missouri . . . . .	.37 MoReg 1699 . . . . .Nov. 8, 2012 . . . . .	May 6, 2013
<b>Plant Industries</b>			
2 CSR 70-11.070	Pine Shoot Beetle Intrastate Quarantine . . . . .	.37 MoReg 1637 . . . . .Oct. 12, 2012 . . . . .	April 9, 2013
<b>Department of Economic Development</b>			
<b>Public Service Commission</b>			
4 CSR 240-31.010	Definitions . . . . .	.37 MoReg 1003 . . . . .June 1, 2012 . . . . .	Feb. 28, 2013
<b>Department of Public Safety</b>			
<b>Missouri State Highway Patrol</b>			
11 CSR 50-3.100	Nonresident Temporary Boater Identification Certificate . . . . .	.37 MoReg 1439 . . . . .Sept. 14, 2012 . . . . .	March 12, 2013
<b>Department of Revenue</b>			
<b>Director of Revenue</b>			
12 CSR 10-41.010	Annual Adjusted Rate of Interest . . . . .	.37 MoReg 1701 . . . . .Jan. 1, 2013 . . . . .	June 29, 2013
<b>Department of Social Services</b>			
<b>MO HealthNet Division</b>			
13 CSR 70-10.110	Nursing Facility Reimbursement Allowance . . . . .	.37 MoReg 1131 . . . . .July 1, 2012 . . . . .	Dec. 28, 2012
13 CSR 70-15.010	Inpatient Hospital Services Reimbursement Plan; Outpatient Hospital Services Reimbursement Methodology . . . . .	.37 MoReg 1131 . . . . .July 1, 2012 . . . . .	Dec. 28, 2012
13 CSR 70-15.110	Federal Reimbursement Allowance (FRA) . . . . .	.37 MoReg 1132 . . . . .July 1, 2012 . . . . .	Dec. 28, 2012
13 CSR 70-15.160	Prospective Outpatient Hospital Services Reimbursement Methodology . . . . .	.37 MoReg 1134 . . . . .July 1, 2012 . . . . .	Dec. 28, 2012
13 CSR 70-15.220	Disproportionate Share Hospital Payments . . . . .	.37 MoReg 1135 . . . . .July 1, 2012 . . . . .	Dec. 28, 2012
<b>Elected Officials</b>			
<b>Treasurer</b>			
15 CSR 50-4.030	Missouri MOST 529 Matching Grant Program . . . . .	.37 MoReg 731 . . . . .April 15, 2012 . . . . .	Jan. 23, 2013
<b>Department of Insurance, Financial Institutions and Professional Registration</b>			
<b>Missouri Dental Board</b>			
20 CSR 2110-2.170	Fees . . . . .	.37 MoReg 1291 . . . . .Aug. 5, 2012 . . . . .	Feb. 28, 2013
<b>State Board of Pharmacy</b>			
20 CSR 2220-4.010	General Fees . . . . .	.37 MoReg 1221 . . . . .July 31, 2012 . . . . .	Feb. 28, 2013
<b>State Committee for Social Workers</b>			
20 CSR 2263-1.040	School Social Worker Examinations Approved by the Committee . . . . .	.37 MoReg 1561 . . . . .Sept. 28, 2012 . . . . .	March 26, 2013
<b>Missouri Consolidated Health Care Plan</b>			
<b>Health Care Plan</b>			
22 CSR 10-2.010	Definitions . . . . .	.37 MoReg 1701 . . . . .Jan. 1, 2013 . . . . .	June 29, 2013
22 CSR 10-2.020	General Membership Provisions . . . . .	.37 MoReg 1702 . . . . .Jan. 1, 2013 . . . . .	June 29, 2013
22 CSR 10-2.020	General Membership Provisions . . . . .	.37 MoReg 1702 . . . . .Jan. 1, 2013 . . . . .	June 29, 2013
22 CSR 10-2.045	Plan Utilization Review Policy . . . . .	.37 MoReg 1715 . . . . .Jan. 1, 2013 . . . . .	June 29, 2013
22 CSR 10-2.051	PPO 300 Plan Benefit Provisions and Covered Charges . . . . .	.37 MoReg 1716 . . . . .Jan. 1, 2013 . . . . .	June 29, 2013
22 CSR 10-2.052	PPO 600 Plan Benefit Provisions and Covered Charges . . . . .	.37 MoReg 1717 . . . . .Jan. 1, 2013 . . . . .	June 29, 2013
22 CSR 10-2.053	High Deductible Health Plan Benefit Provisions and Covered Charges . . . . .	.37 MoReg 1717 . . . . .Jan. 1, 2013 . . . . .	June 29, 2013
22 CSR 10-2.055	Medical Plan Benefit Provisions and Covered Charges . . . . .	.37 MoReg 1719 . . . . .Jan. 1, 2013 . . . . .	June 29, 2013
22 CSR 10-2.060	PPO 300 Plan, PPO 600 Plan, and HDHP Limitations . . . . .	.37 MoReg 1724 . . . . .Jan. 1, 2013 . . . . .	June 29, 2013
22 CSR 10-2.070	Coordination of Benefits . . . . .	.37 MoReg 1726 . . . . .Jan. 1, 2013 . . . . .	June 29, 2013
22 CSR 10-2.075	Review and Appeals Procedure . . . . .	.37 MoReg 1727 . . . . .Jan. 1, 2013 . . . . .	June 29, 2013
22 CSR 10-2.090	Pharmacy Benefit Summary . . . . .	.37 MoReg 1729 . . . . .Jan. 1, 2013 . . . . .	June 29, 2013
22 CSR 10-2.091	Wellness Program Coverage, Provisions, and Limitations . . . . .	.37 MoReg 1732 . . . . .Jan. 1, 2013 . . . . .	June 29, 2013

Agency		Publication	Effective	Expiration
<b>22 CSR 10-2.094</b>	Tobacco-Free Incentive Provisions and Limitations . . . . .	.37 MoReg 1440 . . . . .	Oct. 1, 2012 . . . . .	March 29, 2013 . . . . .
<b>22 CSR 10-2.110</b>	General Foster Parent Membership Provisions . . . . .	.37 MoReg 1441 . . . . .	Oct. 1, 2012 . . . . .	March 29, 2013 . . . . .
<b>22 CSR 10-2.120</b>	Wellness Program . . . . .	.37 MoReg 1446 . . . . .	Oct. 1, 2012 . . . . .	March 29, 2013 . . . . .
<b>22 CSR 10-2.130</b>	Additional Plan Options . . . . .	.37 MoReg 1732 . . . . .	Jan. 1, 2013 . . . . .	June 29, 2013 . . . . .
<b>22 CSR 10-3.010</b>	Definitions . . . . .	.37 MoReg 1733 . . . . .	Jan. 1, 2013 . . . . .	June 29, 2013 . . . . .
<b>22 CSR 10-3.020</b>	General Membership Provisions . . . . .	.37 MoReg 1736 . . . . .	Jan. 1, 2013 . . . . .	June 29, 2013 . . . . .
<b>22 CSR 10-3.020</b>	General Membership Provisions . . . . .	.37 MoReg 1736 . . . . .	Jan. 1, 2013 . . . . .	June 29, 2013 . . . . .
<b>22 CSR 10-3.045</b>	Plan Utilization Review Policy . . . . .	.37 MoReg 1743 . . . . .	Jan. 1, 2013 . . . . .	June 29, 2013 . . . . .
<b>22 CSR 10-3.053</b>	PPO 1000 Plan Benefit Provisions and Covered Charges . . . . .	.37 MoReg 1744 . . . . .	Jan. 1, 2013 . . . . .	June 29, 2013 . . . . .
<b>22 CSR 10-3.054</b>	PPO 2000 Plan Benefit Provisions and Covered Charges . . . . .	.37 MoReg 1745 . . . . .	Jan. 1, 2013 . . . . .	June 29, 2013 . . . . .
<b>22 CSR 10-3.055</b>	High Deductible Health Plan Benefit Provisions and Covered Charges . . . . .	.37 MoReg 1746 . . . . .	Jan. 1, 2013 . . . . .	June 29, 2013 . . . . .
<b>22 CSR 10-3.056</b>	PPO 600 Plan Benefit Provisions and Covered Charges . . . . .	.37 MoReg 1747 . . . . .	Jan. 1, 2013 . . . . .	June 29, 2013 . . . . .
<b>22 CSR 10-3.057</b>	Medical Plan Benefit Provisions and Covered Charges . . . . .	.37 MoReg 1748 . . . . .	Jan. 1, 2013 . . . . .	June 29, 2013 . . . . .
<b>22 CSR 10-3.060</b>	PPO 600 Plan, PPO 1000 Plan, PPO 2000 Plan, and HDHP Limitations . . . . .	.37 MoReg 1754 . . . . .	Jan. 1, 2013 . . . . .	June 29, 2013 . . . . .
<b>22 CSR 10-3.070</b>	Coordination of Benefits . . . . .	.37 MoReg 1755 . . . . .	Jan. 1, 2013 . . . . .	June 29, 2013 . . . . .
<b>22 CSR 10-3.075</b>	Review and Appeals Procedure . . . . .	.37 MoReg 1756 . . . . .	Jan. 1, 2013 . . . . .	June 29, 2013 . . . . .
<b>22 CSR 10-3.090</b>	Pharmacy Benefit Summary . . . . .	.37 MoReg 1758 . . . . .	Jan. 1, 2013 . . . . .	June 29, 2013 . . . . .
<b>22 CSR 10-3.130</b>	Additional Plan Options . . . . .	.37 MoReg 1761 . . . . .	Jan. 1, 2013 . . . . .	June 29, 2013 . . . . .



# Executive Orders

Executive Orders	Subject Matter	Filed Date	Publication
<b>2012</b>			
<b>12-10</b>	Advises that state offices will be closed on Friday November 23, 2012.	Nov. 2, 2012	37 MoReg 1639
<b>12-09</b>	Extends Executive Order 12-08 in order to extend the deadline for completion of approved projects under the Emergency Cost-Share Program and establishes a Program Audit and Compliance Team to inspect a sample of completed projects. It also extends Executive Order 12-07 until Nov. 15, 2012.	Sept. 10, 2012	37 MoReg 1519
<b>12-08</b>	Authorizes the State Soil and Water Districts Commission to implement an emergency cost-share program to address water challenges to landowners engaged in livestock or crop production due to the current drought. Additionally, it establishes the Agriculture Water Resource Technical Review Team.	July 23, 2012	37 MoReg 1294
<b>12-07</b>	Declares a state of emergency, directs the Missouri State Emergency Operations Plan be activated, and extends Executive Order 12-06 to Oct. 1, 2012, in response to the severe heat, dry conditions, and fire risks affecting the state.	July 23, 2012	37 MoReg 1292
<b>12-06</b>	Activates the Missouri State Emergency Operations Center and directs the State Emergency Management Agency, State Fire Marshall, Adjutant General, and such other agencies to coordinate with local authorities affected by fire danger due to the prolonged period of record heat and low precipitation	June 29, 2012	37 MoReg 1139
<b>12-05</b>	Extends Executive Orders 11-06, 12-03, 11-07, 11-11, 11-14, and 12-04 until June 1, 2012	March 13, 2012	37 MoReg 569
<b>12-04</b>	Activates the state militia in response to severe weather that began on February 28, 2012	Feb. 29, 2012	37 MoReg 503
<b>12-03</b>	Declares a state of emergency and directs that the Missouri State Emergency Operations Plan be activated due to the severe weather that began on February 28, 2012	Feb. 29, 2012	37 MoReg 501
<b>12-02</b>	Orders the transfer of all authority, powers, and duties of all remaining audit and compliance responsibilities relating to Medicaid Title XIX, SCHIP Title XXI, and Medicaid Waiver programs from the Dept. of Health and Senior Services and the Dept. of Mental Health to the Dept. of Social Services effective Aug. 28, 2012, unless disapproved within sixty days of its submission to the Second Regular Session of the 96th General Assembly	Jan. 23, 2012	37 MoReg 313
<b>12-01</b>	Designates members of the governor's staff to have supervisory authority over certain departments, divisions, and agencies	Jan. 23, 2012	37 MoReg 311
<b>2011</b>			
<b>11-25</b>	Extends the declaration of emergency contained in Executive Order 11-06 (and extended by Executive Orders 11-09, 11-19, and 11-23) until March 15, 2012, unless extended in whole or part by subsequent order. Further Executive Orders 11-07, 11-11, and 11-14 are extended until March 15, 2012, unless extended in whole or part by subsequent order	Dec. 14, 2011	37 MoReg 95
<b>11-24</b>	Designates members of the governor's staff to have supervisory authority over certain departments, divisions, and agencies	Nov. 18, 2011	37 MoReg 5
<b>11-23</b>	Extends Executive Order 11-20 until October 15, 2011, and extends Executive Orders 11-06, 11-07, 11-08, 11-11, 11-14, and 11-18 until December 18, 2011	Sept. 13, 2011	36 MoReg 2157
<b>11-22</b>	Designates members of the governor's staff to have supervisory authority over certain departments, divisions, and agencies	July 26, 2011	36 MoReg 1979
<b>11-21</b>	Authorizes the Joplin Public School system to immediately begin to retrofit, equip, and furnish various buildings to house students during the 2011-2012 school year without requiring advertisements for bids	June 17, 2011	36 MoReg 1800
<b>11-20</b>	Extends certain terms of Executive Order 11-12 to help Missouri citizens impacted by the Joplin tornado of April 22, 2011	June 17, 2011	36 MoReg 1798
<b>11-19</b>	Extends certain terms of Executive Orders 11-06, 11-07, 11-08, 11-10, 11-11, 11-13, 11-14, 11-15, 11-16, and 11-18 until September 15, 2011	June 17, 2011	36 MoReg 1796
<b>11-18</b>	Activates the state militia in response to flooding events occurring and threatening along the Missouri River	June 8, 2011	36 MoReg 1739
<b>11-17</b>	Establishes the State of Missouri Resource, Recovery & Rebuilding Center in the City of Joplin in response to a tornado that struck there on May 22, 2011	June 7, 2011	36 MoReg 1737

Executive Orders	Subject Matter	Filed Date	Publication
11-16	Authorizes the Joplin Public Schools to immediately begin to retrofit and furnish warehouse and retail structures to house district programs displaced by the tornado and severe storms on May 22, 2011, without requiring advertisements for bids	June 3, 2011	36 MoReg 1735
11-15	Authorizes the Joplin Public School system to immediately rebuild, restore, and/or renovate Emerson Elementary, Kelsey Norman Elementary, Old South Middle School, and Washington Education Center without requiring advertisement for bids	June 1, 2011	36 MoReg 1594
11-14	Activates the state militia in response to a tornado that hit the City of Joplin on May 22, 2011	May 26, 2011	36 MoReg 1592
11-13	Authorizes the Joplin Public Schools system to immediately begin rebuilding and replacing the materials for three of its buildings that were destroyed in a tornado that struck on May 22, 2011, without requiring advertisement for bids	May 26, 2011	36 MoReg 1590
11-12	Orders the director of the Department of Insurance, Financial Institutions and Professional Registration to temporarily waive, suspend, and/or modify any statute or regulation under his purview in order to best serve the interests of those citizens affected by the tornado that hit the city of Joplin on May 22, 2011	May 26, 2011	36 MoReg 1587
11-11	Orders the director of revenue to issue duplicate or replacement license, nondriver license, certificate of motor vehicle ownership, number plate, or tabs lost or destroyed as a result of the tornado that hit the city of Joplin and to waive all state fees and charges for such duplicate or replacement	May 26, 2011	36 MoReg 1585
11-10	Orders the Missouri Department of Health and Senior Services and the State Board of Pharmacy to temporarily waive certain rules and regulations to allow medical practitioners and pharmacists responding to the tornado and severe storms in Joplin to best serve the interests of public health and safety	May 24, 2011	36 MoReg 1583
11-09	Extends Executive Orders 11-06, 11-07, and 11-08 through June 20, 2011	May 20, 2011	36 MoReg 1581
11-08	Activates the state militia in response to severe weather that began on April 22	April 25, 2011	36 MoReg 1449
11-07	Gives the director of the Department of Natural Resources the authority to temporarily suspend regulations in the aftermath of severe weather that began on April 22	April 25, 2011	36 MoReg 1447
11-06	Declares a state of emergency for the state of Missouri and activates the Missouri State Emergency Operations Plan due to severe weather that began on April 22	April 22, 2011	36 MoReg 1445
11-05	Orders the Missouri Department of Transportation to assist local jurisdictions in counties that: 1) received record snowfalls; and 2) continuing snow clearance exceeds their capabilities	Feb. 4, 2011	36 MoReg 883
11-04	Activates the state militia in response to severe weather that began on January 31, 2011	Jan. 31, 2011	36 MoReg 881
11-03	Declares a state of emergency exists in the state of Missouri and directs that the Missouri State Emergency Operations Plan be activated	Jan. 31, 2011	36 MoReg 879
11-02	Extends the declaration of emergency contained in Executive Order 10-27 and the terms of Executive Order 11-01 through February 28, 2011	Jan. 28, 2011	36 MoReg 877
11-01	Gives the Director of the Department of Natural Resources the authority to temporarily suspend regulations in the aftermath of severe winter weather that began on December 30	Jan. 4, 2011	36 MoReg 705

The rule number and the MoReg publication date follow each entry to this index.

## ACCOUNTANCY, MISSOURI STATE BOARD OF,

definitions; 20 CSR 2010-2.005; 9/17/12  
effective dates and basic requirements; 20 CSR 2010-4.010; 9/4/12;  
12/17/12  
general purpose of ethics rules; 20 CSR 2010-3.010; 9/17/12  
other responsibilities and practices; 20 CSR 2010-3.060; 9/17/12  
peer review standards; 20 CSR 2010-5.070; 9/17/12  
requirements for an initial license to practice; 20 CSR 2010-2.061;  
9/4/12, 12/17/12

## ARCHITECTS, PROFESSIONAL ENGINEERS, PROFESSIONAL LAND SURVEYORS, AND LANDSCAPE ARCHITECTS, MISSOURI BOARD FOR,

application, renewal, reinstatement, relicensure, and miscellaneous  
fees; 20 CSR 2030-6.015; 9/4/12, 12/17/12  
continuing professional competency for professional engineers; 20  
CSR 2030-11.015; 9/4/12, 12/17/12  
criteria to file application under section 324.008.1., RSMo, for a  
temporary courtesy license; 20 CSR 2030-4.055; 9/4/12,  
12/17/12

## AGRICULTURE

### animal health

movement of livestock, poultry, and exotic animals within  
Missouri; 2 CSR 30-2.020; 6/1/12, 11/1/12, 12/3/12

### plant industries

fee schedule; 2 CSR 70-10.075; 8/1/12  
nonprofit nursery dealer defined; 2 CSR 70-10.025; 8/1/12  
pine shoot beetle intrastate quarantine; 2 CSR 70-11.070;  
11/15/12

### state milk board

adoption of the *Grade "A" Pasteurized Milk Ordinance (PMO)*,  
2011 revision of the United States Department of  
Health and Human Services, Public Health  
Service/Food and Drug Administration by reference;  
2 CSR 80-3.130; 9/4/12, 12/17/12

dairy manufacturing plant, dairy manufacturing farm, and per-  
sonnel licensure; 2 CSR 80-6.041; 9/4/12, 12/17/12

### definitions

2 CSR 80-3.010; 9/4/12, 12/17/12  
enforcement interpretation; 2 CSR 80-3.120; 9/4/12, 12/17/12  
examination of milk and milk products, the; 2 CSR 80-3.060;  
9/4/12, 12/17/12

grading of milk and milk products; 2 CSR 80-3.070; 9/4/12,  
12/17/12

inspection fee; 2 CSR 80-5.010; 7/16/12, 11/1/12

inspection of production and distribution facilities; 2 CSR 80-  
3.050; 9/4/12, 12/17/12

labeling; 2 CSR 80-3.040; 9/4/12, 12/17/12

notification of disease; 2 CSR 80-3.100; 9/4/12, 12/17/12

permits; 2 CSR 80-3.030; 9/4/12, 12/17/12  
procedure when infection is suspected; 2 CSR 80-3.110;  
9/4/12, 12/17/12

protection and transportation of raw milk and cream; 2 CSR  
80-6.021; 9/4/12, 12/17/12

sale of adulterated, ungraded, or misbranded milk or milk  
products prohibited; 2 CSR 80-3.020; 9/4/12,  
12/17/12

specifications for the construction and operation of facilities  
and installation of equipment for the production and  
processing of manufacturing milk and milk products; 2  
CSR 80-6.011; 9/4/12, 12/17/12

suspension and reinstatement of permit; 2 CSR 80-3.080;  
9/4/12, 12/17/12

transferring or dipping milk: delivery containers; cooling;  
quarantined residences; 2 CSR 80-3.090; 9/4/12,  
12/17/12

### weights and measures

#### liquefied petroleum gases

definitions and general provisions; 2 CSR 90-10.001;  
8/1/12, 12/17/12

inspection authority—duties; 2 CSR 90-10.011; 8/1/12,  
12/17/12

installation requirements; 2 CSR 90-10.013; 8/1/12,  
12/17/12

NFPA Manual; No. 54, *National Fuel Gas Code*; 2 CSR  
90-10.020; 8/1/12, 12/17/12

NFPA Manual; No. 58, *Storage and Handling of  
Liquefied Petroleum Gases*; 2 CSR 90-10.040;  
8/1/12, 12/17/12

NFPA Manual; No. 1192, Chapter 5, *Standard for  
Recreational Vehicles*; 2 CSR 90-10.090;  
8/1/12, 12/17/12

registration—training; 2 CSR 90-10.012; 8/1/12, 12/17/12  
reporting of odorized LP-gas release, fire, or explosion; 2  
CSR 90-10.120; 8/1/12, 12/17/12

storage; 2 CSR 90-10.014; 8/1/12, 12/17/12

## AIR QUALITY, AIR POLLUTION CONTROL

control of gasoline Reid vapor pressure; 10 CSR 10-2.330; 12/3/12

control of mercury emissions from electric generating units; 10  
CSR 10-6.368; 10/1/12

definitions and common reference tables; 10 CSR 10-6.020;  
8/15/12

emission standards for hazardous air pollutants; 10 CSR 10-6.080;  
6/15/12, 11/1/12

general organization; 10 CSR 10-1.010; 11/15/12

maximum achievable control technology regulations; 10 CSR 10-  
6.075; 6/15/12, 11/1/12

new source performance regulations; 10 CSR 10-6.070; 6/15/12,  
11/1/12

on-board diagnostics motor vehicle emissions inspection; 10 CSR  
10-5.381; 6/15/12, 11/1/12

sewage sludge incinerators; 10 CSR 10-6.191; 10/1/12

## ATTORNEY GENERAL

methods by which a person or entity desiring to make telephone  
solicitations will obtain access to the database of residential sub-  
scriber's notice of objection to receiving telephone solicitations and  
the cost assessed for access to the database; 15 CSR 60-13.060;  
7/2/12, 10/15/12

## CERTIFICATE OF NEED PROGRAM

application review schedule; 19 CSR 60-50; 10/1/12, 11/15/12,  
12/3/12

## CHILDREN'S DIVISION

developmental disability care provider tax credit; 13 CSR 35-  
100.030; 11/1/12

residential treatment agency tax credit; 13 CSR 35-100.010; 11/1/12

## CONSERVATION, DEPARTMENT OF

bullfrogs and green frogs; 3 CSR 10-12.115; 11/1/12

class I wildlife breeder permit; 3 CSR 10-9.350; 10/1/12

### deer

firearms hunting season; 3 CSR 10-7.433; 8/1/12, 10/1/12

### fishing

#### daily and possession limits

3 CSR 10-11.210; 11/1/12

3 CSR 10-12.140; 11/1/12

general provisions and seasons; 3 CSR 10-11.200; 11/1/12

#### length limits

3 CSR 10-11.215; 11/1/12

3 CSR 10-12.145; 11/1/12

methods and hours; 3 CSR 10-11.205; 11/1/12  
 general prohibition; applications;  
     3 CSR 10-9.110; 11/1/12  
 hunting  
     and trapping; 3 CSR 10-12.125; 11/1/12  
     general provisions and seasons; 3 CSR 10-11.180; 11/1/12  
 licensed hunting preserve permit; 3 CSR 10-9.560; 10/1/12  
 permits required; exceptions; 3 CSR 10-5.205; 11/1/12  
 prohibited species; 3 CSR 10-4.117; 11/1/12  
 restricted zones; 3 CSR 10-6.415; 11/1/12  
 use of  
     boats and motors; 3 CSR 10-12.110; 11/1/12  
     traps; 3 CSR 10-8.510; 9/17/12, 12/3/12  
 white bass, yellow bass, striped bass; 3 CSR 10-6.545; 11/1/12

### **CREDIT UNIONS, DIVISION OF**

audit by supervisory committee; 20 CSR 1100-2.170; 6/15/12, 10/1/12  
 audits in lieu of examination: procedure; 20 CSR 1100-2.100; 6/15/12, 10/1/12  
 completing dissolution of credit union; 20 CSR 1100-2.070; 6/15/12, 10/1/12  
 credit union service organization (CUSO); 20 CSR 1100-2.085; 6/15/12, 10/1/12  
 membership; 20 CSR 1100-2.020; 6/15/12, 10/1/12  
 surety bond requirement; 20 CSR 1100-2.030; 6/15/12, 10/1/12  
 unlocatable members; small share balances: how to handle; 20 CSR 1100-2.090; 6/15/12, 10/1/12

### **DENTAL BOARD, MISSOURI**

conscious sedation; 20 CSR 2110-4.020; 9/4/12  
 deep sedation/general anesthesia; 20 CSR 2110-4.040; 9/4/12  
 definitions; 20 CSR 2110-4.010; 9/4/12  
 dental assistants; 20 CSR 2110-2.120; 9/4/12  
 dental hygienists; 20 CSR 2110-2.130; 9/4/12  
 fees; 20 CSR 2110-2.170; 9/4/12  
 guidelines for administration of moderate sedation; 20 CSR 2110-4.030; 9/4/12  
 moderate sedation; 20 CSR 2110-4.020; 9/4/12

### **DRIVER LICENSE BUREAU RULES**

prohibit release of information on peace officers and their immediate family; 12 CSR 10-24.462; 10/15/12

### **ELEMENTARY AND SECONDARY EDUCATION, DEPARTMENT OF**

administration of high school equivalence program; 5 CSR 20-500.330; 6/1/12, 11/1/12  
 administrative procedures for the minority teaching scholarship program; 5 CSR 20-400.350; 10/1/12  
 administrative procedures for the teacher education scholarship program; 5 CSR 20-400.340; 10/1/12  
 basic education competencies required prior to admission to approved teacher education programs in Missouri; 5 CSR 20-400.310; 10/1/12  
 general provisions governing programs authorized under early childhood development, education, and care; 5 CSR 20-600.130; 10/1/12  
 minimum requirements for school bus chassis and body; 5 CSR 30-261.025; 6/1/12, 11/1/12  
 Missouri School Improvement Program—5 resources and process standards and indicators; 5 CSR 20-100.255; 11/1/12  
 private school agriculture programs; 5 CSR 20-200.280; 12/3/12  
 procedures and standards for approval and accreditation of professional education programs in Missouri; 5 CSR 20-400.440; 10/1/12  
 required assessments for professional education certification in Missouri; 5 CSR 20-400.280; 11/15/12  
 urban flight and rural needs scholarship program; 5 CSR 20-400.420; 10/1/12

### **EXECUTIVE ORDERS**

advises that state offices will be closed on Friday, November 23, 2012; 12-10; 11/15/12  
 extends Executive Order 12-08 in order to extend the deadline for completion of approved projects under the Emergency Cost-Share Program and establishes a Program Audit and Compliance Team to inspect a sample of completed projects. It also extends Executive Order 12-07 until Nov. 15, 2012; 12-09; 10/15/12

### **FAMILY SUPPORT DIVISION**

assignment of a protective payee over temporary assistance benefits when the head-of-household is declared ineligible for temporary assistance pursuant to 13 CSR 40-2.400 through 13 CSR 40-2.450; 13 CSR 40-2.450; 8/1/12  
 definitions for the screening and testing for illegal use of controlled substances by temporary assistance applicants and recipients; 13 CSR 40-2.400; 8/1/12  
 hearings for proceedings under 13 CSR 40-2.400 through 13 CSR 40-2.450; 13 CSR 40-2.440; 8/1/12  
 screening temporary assistance applicants and recipients for illegal use of a controlled substance; 13 CSR 40-2.410; 8/1/12  
 substance abuse treatment program for temporary assistance recipients; 13 CSR 40-2.430; 8/1/12  
 testing for the illegal use of a controlled substance by applicants and recipients of temporary assistance; 13 CSR 40-2.420; 8/1/12

### **GAMING COMMISSION, MISSOURI**

affiliate supplier's license; 11 CSR 45-4.205; 10/1/12  
 application period and fees for a class A license; 11 CSR 45-4.050; 10/1/12  
 application period and fees for class A and class B license; 11 CSR 45-4.050; 10/1/12  
 license renewal; 11 CSR 45-4.190; 10/1/12  
 minimum internal control standards (MICS)  
     chapter E; 11 CSR 45-9.105; 11/1/12  
     chapter F; 11 CSR 45-9.106; 12/3/12  
     chapter N; 11 CSR 45-9.114; 5/1/12, 10/1/12  
     chapter R; 11 CSR 45-9.118; 11/1/12  
     chapter T; 11 CSR 45-9.120; 12/3/12  
 objectives of an internal control system; 11 CSR 45-9.020; 6/1/12, 11/1/12  
 occupational and key person/key person business entity license application and annual fees; 11 CSR 45-4.380; 10/1/12  
 occupational licenses for class A, class B, suppliers and affiliate suppliers; 11 CSR 45-4.260; 10/1/12  
 occupational license renewal; 11 CSR 45-4.390; 10/1/12  
 promotional activities; 11 CSR 45-5.181; 5/1/12, 10/1/12  
 statistical performance of electronic gaming devices; 11 CSR 45-5.193; 11/1/12  
 supplier's license application and annual fees; 11 CSR 45-4.240; 10/1/12  
 supplier's license renewal; 11 CSR 45-4.250; 10/1/12  
 table game cards—receipt, storage, inspections, and removal from use; 11 CSR 45-5.184; 10/1/12  
 tips and gifts; 11 CSR 45-8.130; 10/1/12

### **HEALING ARTS, STATE BOARD OF REGISTRATION FOR THE**

human chorionic gonadotropin (HCG) of no medical or osteopathic value in the treatment of obesity and weight loss; 20 CSR 2150-2.170; 9/17/12

### **HEALTH AND SENIOR SERVICES**

health laboratory, state public  
     approval of methods for the analysis of blood, saliva, and urine for the presence of drugs; 19 CSR 25-30.080; 7/2/12, 11/1/12  
     approval of methods for the determination of blood alcohol content from samples of blood, saliva, or urine; 19 CSR 25-30.070; 7/2/12, 11/1/12  
     approved breath analyzers; 19 CSR 25-30.050; 7/2/12, 11/1/12

breath analyzer calibration and accuracy verification standards; 19 CSR 25-30.051; 7/2/12, 11/1/12  
general provisions for the determination of blood, breath, saliva, or urine analysis and drug testing; 19 CSR 25-30.011; 7/2/12, 11/1/12  
operating procedures for breath analyzers; 19 CSR 25-30.060; 7/2/12, 11/1/12  
type I permit; 19 CSR 25-30.021; 7/2/12, 11/1/12  
type II permit; 19 CSR 25-30.031; 7/2/12, 11/1/12  
type III permit; 19 CSR 25-30.041; 7/2/12, 11/1/12  
regulation and licensure  
community-based or regional plan for emergency medical services for trauma, ST segment elevation myocardial infarction (STEMI) or stroke; 19 CSR 30-40.770; 12/17/12  
definitions and abbreviations relating to  
stroke centers; 19 CSR 30-40.710; 12/17/12  
ST segment elevation myocardial infarction (STEMI) centers; 19 CSR 30-40.740; 12/17/12  
the transport protocol for stroke and the transport protocol for ST segment elevation myocardial infarction (STEMI) patients; 19 CSR 30-40.780; 12/17/12  
fire safety and emergency preparedness standards for residential care facilities and assisted living facilities; 19 CSR 30-86.022; 10/15/12  
level I medication aide training program; 19 CSR 30-84.030; 5/1/12, 10/1/12  
standards for  
stroke center designation; 19 CSR 30-40.730; 12/17/12  
ST segment elevation myocardial infarction (STEMI) center designation; 19 CSR 30-40.760; 12/17/12  
stroke center designation application and review; 19 CSR 30-40.720; 12/17/12  
ST segment elevation myocardial infarction (STEMI) center designation application and review; 19 CSR 30-40.750; 12/17/12  
transport protocol for stroke and ST segment elevation myocardial infarction (STEMI) patients; 19 CSR 30-40.790; 12/17/12

#### HIGHER EDUCATION, DEPARTMENT OF

rules for certification of proprietary schools; 6 CSR 10-5.010; 10/15/12

#### HIGHWAYS AND TRANSPORTATION COMMISSION

skill performance evaluation certificates for commercial drivers; 7 CSR 10-25.010; 11/15/12

#### INSURANCE

applied behavior analysis maximum benefit; 20 CSR; 3/15/12

#### LABOR AND INDUSTRIAL RELATIONS, DEPARTMENT OF

labor standards  
occupational titles of work descriptions; 8 CSR 30-3.060; 9/17/12

#### MISSOURI CONSOLIDATED HEALTH CARE PLAN

public entity membership  
additional plan options; 22 CSR 10-3.130; 12/3/12  
agreement and participation period; 22 CSR 10-3.030; 12/3/12  
coordination of benefits; 22 CSR 10-3.070; 12/3/12  
definitions; 22 CSR 10-3.010; 12/3/12  
general membership provisions; 22 CSR 10-3.020; 12/3/12  
limitations  
PPO 600 Plan, PPO 1000 Plan, PPO 2000 Plan, and HDHP; 22 CSR 10-3.060; 12/3/12  
miscellaneous provisions; 22 CSR 10-3.080; 12/3/12  
pharmacy benefit summary; 22 CSR 10-3.090; 12/3/12

plan benefit provisions and covered charges  
high deductible health; 22 CSR 10-3.055; 12/3/12  
medical; 22 CSR 10-3.057; 12/3/12  
PPO 600; 22 CSR 10-3.056; 12/3/12  
PPO 1000; 22 CSR 10-3.053; 12/3/12  
PPO 2000; 22 CSR 10-3.054; 12/3/12  
plan utilization review policy; 22 CSR 10-3.045; 12/3/12  
review and appeals procedure; 22 CSR 10-3.075; 12/3/12  
state membership  
additional plan options; 22 CSR 10-2.130; 12/3/12  
contributions; 22 CSR 10-2.030; 12/3/12  
coordination of benefits; 22 CSR 10-2.070; 12/3/12  
definitions; 22 CSR 10-2.010; 12/3/12  
general foster parent membership provisions; 22 CSR 10-2.110; 10/1/12  
general membership provisions; 22 CSR 10-2.020; 12/3/12  
limitations  
PPO 300 Plan, PPO 600 Plan, and HDHP; 22 CSR 10-2.060; 12/3/12  
miscellaneous provisions; 22 CSR 10-2.080; 12/3/12  
pharmacy benefit summary; 22 CSR 10-2.090; 12/3/12  
plan benefit provisions and covered charges  
high deductible health; 22 CSR 10-2.053; 12/3/12  
medical; 22 CSR 10-2.055; 12/3/12  
Medicare supplement; 22 CSR 10-2.054; 12/3/12  
PPO 300; 22 CSR 10-2.051; 12/3/12  
PPO 600; 22 CSR 10-2.052; 12/3/12  
plan utilization review policy; 22 CSR 10-2.045; 12/3/12  
review and appeals procedure; 22 CSR 10-2.075; 12/3/12  
tobacco-free incentive provisions and limitations; 22 CSR 10-2.094; 10/1/12  
wellness program; 22 CSR 10-2.120; 10/1/12  
wellness program coverage, provisions, and limitations; 22 CSR 10-2.091; 12/3/12

#### MO HEALTHNET

federal reimbursement allowance (FRA); 13 CSR 70-15.110; 8/1/12, 12/17/12  
global per diem adjustments to nursing facility and HIV nursing facility reimbursement rates; 13 CSR 70-10.016; 8/1/12, 12/17/12  
inpatient hospital services reimbursement plan; outpatient hospital services reimbursement methodology; 13 CSR 70-15.010; 8/1/12, 12/17/12  
nursing facility reimbursement allowance; 13 CSR 70-10.110; 8/1/12, 12/17/12  
prospective outpatient hospital services reimbursement methodology; 13 CSR 70-15.160; 8/1/12, 12/17/12

#### OCCUPATIONAL THERAPY, MISSOURI BOARD OF

fees; 20 CSR 2205-1.050; 8/1/12, 11/15/12

#### PETROLEUM STORAGE TANK INSURANCE FUND BOARD OF TRUSTEES

definitions; 10 CSR 100-2.010; 9/17/12  
participation requirements for aboveground storage tanks; 10 CSR 100-4.020; 9/17/12  
participation requirements for underground storage tanks; 10 CSR 100-4.010; 9/17/12

#### PHARMACY, STATE BOARD OF

general fees; 20 CSR 2220-4.010; 8/15/12, 12/3/12  
pharmacy standards for dispensing blood clotting products; 20 CSR 2220-6.100; 12/17/12  
prescription requirements; 20 CSR 2220-2.013; 6/15/12, 10/1/12

**PROFESSIONAL REGISTRATION, DIVISION OF**

designation of license renewal dates and related renewal information; 20 CSR 2231-2.010; 9/4/12, 12/17/12  
 general organization; 20 CSR 2231-1.010; 9/4/12, 12/17/12

**PUBLIC SAFETY, DEPARTMENT OF****Missouri State Highway Patrol**

aids to navigation and regulatory markers; 11 CSR 50-3.060; 10/1/12  
 display of expiration (renewal) stickers; 11 CSR 50-3.050; 10/1/12  
 display of identification numbers; 11 CSR 50-3.040; 10/1/12  
 diver's flag; 11 CSR 50-3.020; 10/1/12  
 mandatory boater safety education program; 11 CSR 50-3.090; 10/1/12  
 nonresident temporary boater identification certificate; 11 CSR 50-3.100; 10/1/12  
 organization and methods of operation; 11 CSR 50-3.010; 10/1/12  
 reporting a cancellation or change in regetta permit; 11 CSR 50-3.080; 10/1/12  
 reporting requirements; 11 CSR 50-3.070; 10/1/12  
 ski mirror; 11 CSR 50-3.030; 10/1/12

**Missouri State Water Patrol**

aids to navigation and regulatory markers; 11 CSR 80-5.010; 10/1/12  
 display of expiration (renewal) stickers; 11 CSR 80-7.010; 10/1/12  
 display of identification numbers; 11 CSR 80-4.010; 10/1/12  
 diver's flag; 11 CSR 80-2.010; 10/1/12  
 mandatory boater safety education program; 11 CSR 80-9.010; 10/1/12  
 organization and methods of operation; 11 CSR 80-1.010; 10/1/12  
 reporting a cancellation or change in regetta permit; 11 CSR 80-8.010; 10/1/12  
 reporting requirements; 11 CSR 80-6.010; 10/1/12  
 temporary nonresident rental vessel operator permits; 11 CSR 80-9.020; 10/1/12  
 ski mirror; 11 CSR 80-3.010; 10/1/12

**PUBLIC SERVICE COMMISSION**

definitions; 4 CSR 240-31.010; 7/2/12, 11/15/12

**REAL ESTATE APPRAISERS**

application, certification and license fees; 20 CSR 2245-5.020; 12/17/12  
 applications for certification and licensure; 20 CSR 2245-3.010; 12/17/12  
 appraisal management company standards of practice; 20 CSR 2245-10.020; 12/17/12  
 appraiser management company application requirements; 20 CSR 2245-10.010; 12/17/12  
 definitions; 20 CSR 2245-2.010; 12/17/12  
 examination and education; 20 CSR 2245-6.016; 12/17/12  
 general organization; 20 CSR 2245-1.010; 12/17/12  
 implementation of 2015 AQB criteria; 20 CSR 2245-3.001; 12/17/12  
 nonresident certification or licensure; reciprocity; 20 CSR 2245-4.050; 12/17/12  
 renewal; 20 CSR 2245-10.030; 12/17/12  
 surety bond requirements; 20 CSR 2245-10.040; 12/17/12  
 trainee real estate appraiser registration; 20 CSR 2245-3.005; 12/17/12

**REAL ESTATE COMMISSION, MISSOURI**

disputes; 20 CSR 2250-2.040; 9/4/12, 12/17/12

**RETIREMENT SYSTEMS**

county employees' retirement fund  
 benefits upon participant's death; 16 CSR 50-2.120; 10/15/12

contributions; 16 CSR 50-10.030; 10/15/12  
 distribution of accounts; 16 CSR 50-10.050; 10/15/12  
 latest distribution date; 16 CSR 50-20.120; 10/15/12  
 miscellaneous defined contribution plan rules; 16 CSR 50-10.090; 10/15/12  
 plan administration; 16 CSR 50-10.080; 10/15/12  
**LAGERS** (Missouri local government employees' retirement system)  
 definitive break in service to determine eligibility for benefits; 16 CSR 20-2.048; 10/15/12  
 public school retirement system of Missouri, the  
 payment for reinstatement and credit purchases  
 16 CSR 10-4.012; 8/1/12, 11/15/12  
 16 CSR 10-6.045; 8/1/12, 11/15/12  
 payment of funds to the retirement system; 16 CSR 10-3.010; 12/3/12  
 service retirement  
 16 CSR 10-5.010; 8/1/12, 11/15/12  
 16 CSR 10-6.060; 8/1/12, 11/15/12  
 source of funds; 16 CSR 10-6.020; 12/3/12

**SOCIAL WORKERS, STATE COMMITTEE FOR**

school social worker examinations approved by the committee; 20 CSR 2263-1.040; 11/1/12

**TAX**

annual adjusted rate of interest; 12 CSR 10-41.010, 12/3/12

**TAX COMMISSION, STATE**

appeals from the local board of equalization; 12 CSR 30-3.010; 10/1/12  
 appraisal evidence; 12 CSR 30-3.065; 10/1/12  
 utility property to be assessed locally and by the state tax commission; 12 CSR 30-2.015; 10/1/12

**THERAPEUTIC MASSAGE, BOARD OF**

fees; 20 CSR 2197-1.040; 7/16/12, 10/15/12

**VETERINARY MEDICAL BOARD, MISSOURI**

temporary courtesy license; 20 CSR 2270-2.072; 11/1/12

# To Subscribe to the *Missouri Register*

SALUS POPULI SUPREMA LEX ESTO

*"The welfare of the people shall be the  
supreme law."*



ROBIN CARNAHAN

SECRETARY OF STATE

MISSOURI  
REGISTER

Contact us at: phone: (573) 751-4015 or email: [rules@sos.mo.gov](mailto:rules@sos.mo.gov)

## ORDER FORM

- ☐ Enclosed is my check for \$56 as payment in advance for one year of the *Missouri Register*

Please start my subscription with the \_\_\_\_\_ issue.

Please make checks payable to: **Secretary of State** or alternatively call us to charge your credit card.

Mail to: ROBIN CARNAHAN  
SECRETARY OF STATE  
ADMINISTRATIVE RULES DIVISION  
PO Box 1767  
JEFFERSON CITY, MO 65102

\_\_\_\_\_  
Name or Firm (Please Type or Print)

\_\_\_\_\_  
Attn:

\_\_\_\_\_  
Address

\_\_\_\_\_  
City

\_\_\_\_\_  
State

\_\_\_\_\_  
Zip Code

**ROBIN CARNAHAN**  
SECRETARY OF STATE  
PO Box 1767  
JEFFERSON CITY, MO 65102

Periodical  
Postage Paid at  
Jefferson City,  
MO

**THIS ISSUE CONTAINS  
THREE PARTS**

**END OF PART III**